

PSYCHOLOGICAL ABSTRACTS

EDITED BY

WALTER S. HUNTER, CLARK UNIVERSITY
RAYMOND R. WILLOUGHBY (*Assistant Editor*)
CLARK UNIVERSITY

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GENERAL

453. [Anon.] **Twenty-five years' work of the Ethological Society.** *Ethol. J.*, 1929, 14, 69-72.—"The Ethological Society was founded in 1904 for the systematic study of human character and conduct. . . . When the Ethological Society was founded it attracted widespread attention and numerous articles appeared in scientific, philosophic and literary journals, for the study of character was then still ignored by psychologists. Shand, McDougall, Freud, Jung, Adler, J. B. Watson and other psychologists produced their works much later. The Society may, therefore, rightly claim to have done pioneer work and given the impulse to the study of human character, a fact which should be remembered by those who intend to write a history of the literature on this subject." Titles of about 75 addresses which have been delivered before the society are given. There is also a list of speakers.—*F. M. Teagarden* (Pittsburgh).

454. [Anon.] **Bibliography of the scientific writings of Ernest Jones, M.D.** *Int. J. Psychoanal.*, 1929, 10, 363-382.—208 items are listed in chronological order.—*D. Shakow* (Worcester State Hospital).

455. **Bolton, F. E. Behaviorism and education.** *School & Soc.*, 1929, 30, 723-729.—The author, after examining some of the fundamental tenets of behaviorism, concludes that it has contributed little that is radically new in content or method. Believing that the natural-science approach to the problems of human life which behaviorism advocates has resulted in the accumulation of much valuable data, he questions seriously the position that it is the only valid method. He also challenges the sacrifice of consciousness and of innate predispositions.—*H. L. Koch* (Texas).

456. **Boring, E. G. History of experimental psychology.** New York: Century, 1929. Pp. xvi + 699. \$4.00.—The main subdivisions of the book are as follows: the evolution of the scientific method and point of view; physiological psychology in the first half of the 19th century; preparation for experimental psychology within philosophical psychology; founding of experimental psychology; modern experimental psychology; survey of experimental psychology; and an appendix on French psychology with comments on that of certain other nations. 262 pages are devoted to the topics listed prior to the "founding of experimental psychology." This latter topic is developed in terms of Fechner, Helmholtz, Wundt, Brentano, Stumpf, and Müller. The section on modern experimental psychology contains chapters on the following: new psychology (including Ebbinghaus, Külpe, and Titchener), act psychology, British psychology, American psychology

(2 chapters), and *Gestalt* and behaviorism. In the final survey, after a brief recapitulation, the author concludes "that the application of the experimental method to the problem of mind is the great outstanding event in the history of the study of mind, an event to which no other is comparable." He does not believe that there has ever been "any great idea or discovery that has revitalized the science," partly because there have been no really great psychologists and partly because of the conflicts within the science. The book is explicitly limited to the field of experimental psychology conceived in the Wundtian manner as "the psychology of the generalized, human, normal, adult mind as revealed in the psychological laboratory." The presentation contains a large amount of personal history concerning the various psychologists.—*W. S. Hunter* (Clark).

457. **Bourguignon, G. Electrode impolarisable biauriculaire pour la mesure de la chronaxie du nerf vestibulaire.** (A biauricular impolarizable electrode for measuring the chronaxy of the vestibular nerve.) *C. r. Soc. biol.*, 1929, 101, 1057-1058.—The author describes an apparatus suitable for taking the chronaxy of the vestibular nerve. His problem was the determination of the relationship between the size of the vestibular chronaxy and the nature of the personal characteristics of the examined subjects. Such a relationship was clearly shown. All the emotional subjects examined had a small chronaxy (14 to 18 σ), while the non-emotional subjects had a large chronaxy (18 to 22 σ). However, the number of subjects examined is as yet too small for a final conclusion to be drawn.—*Math. H. Piéron* (Sorbonne).

458. **Casamajor, J. The evolution of symbols in the development of consciousness.** *Arch. Neur. & Psychiat.*, 1929, 22, 865-872.—The symbol is a mechanism whereby perceptions, images, and memories are released in terms of psychic work. In evolution, mental states tend to become clearer in the higher forms, and this relative clarity of cognition is consciousness. Speech symbols, the most efficient of human mental symbols, comprise the great bulk of consciousness, leaving to the unconscious those other more inarticulate symbols which man probably shares in part with the rest of the mammals.—*E. C. Whitman* (Boston Psychopathic Hospital).

459. **Cheron, L. Nouveau pneumographe comparatif et localisateur.** (A new comparative, localizing pneumograph.) *C. r. Soc. biol.*, 1929, 101, 1099-1101.—The author describes a piece of apparatus which registers comparative records. It records the respiratory movements of the thorax, as a whole, as well as those of its individual parts. This is done with great sensitiveness and without modification of the movements. The thing which makes

these records comparable from one experiment to another is an arrangement which allows the same resistance and the same elastic force to be offered the thorax from one time to another by means of certain pneumatic pockets affording the same pressure, measurable by a manometer. Furthermore, there is an arrangement interposed between the pockets and the corresponding Marey tambours whereby the volume of air in the tambours remains invariable whatever may be that of the pockets.—*Math. H. Piéron* (Sorbonne).

460. Dashiell, J. P. Note on the use of the term "observer." *Psychol. Rev.*, 1929, 36, 550-551.—The author proposes to drop entirely the misleading term "observer" and use only its equally respectable synonym "subject."—*H. Helson* (Bryn Mawr).

461. Dunlap, K. Sympathetic magic in modern guises. *Science*, 1929, 70, 566-568.—The author deplores the use of analogy in inference, particularly in connection with neo-Lamareckianism. He points out that there is small probability that the experience of parents will affect progeny in a similar direction, unless there be extra-physical factors involved; a methodology for the scientific study of allegedly occult phenomena is thus suggested.—*R. R. Willoughby* (Clark).

462. Eisler, R. Wörterbuch der philosophischen Begriffe. (Dictionary of philosophical concepts.) Berlin: Mittler & Sohne, 1929. Bd. 3, Lfg. 19, 785-906. M. 5.50.—*W. S. Hunter* (Clark).

463. Frankfurt, U. V. O razlichii mezhdu psikhologiel i ideologiel. (The difference between psychology and ideology.) *Vestnik Kommunisticheskoi Akademii*, 1929, 33, 55-79.—The author discusses at length the difference between psychology and ideology. The various theories common in modern psychological thought are taken up from the materialistic point of view. The psychic life of the individual is identical with his psychology. The psychic life deals with human experience and formation of concepts in the various stages of their development. Ideology is that part of the psychic life of the individual which deals with the formation of higher concepts in accordance with the laws of logic and bearing a relationship to some definite subject or object. The author analyzes psychology as a study of subjective experiences and comes to the conclusion that there is justification for its existence even from the point of view of orthodox communism.—*J. Kasanin* (Boston Psychopathic Hospital).

464. Freud, S. To Ernest Jones. On the occasion of his fiftieth birthday. *Int. J. Psychoanal.*, 1929, 10, 123-124.—A short tribute to Jones, to whom this issue of the journal is dedicated.—*D. Shakow* (Worcester State Hospital).

465. Fürst, J. Grundriss der empirischen Psychologie und Logik. (21st ed.) (Outline of empirical psychology and logic.) Stuttgart: Bonz, 1928. Pp. xxii + 209.—*W. S. Hunter* (Clark).

466. Gall, D. C. An electrically maintained tuning fork with a calibrated speed adjustment. *J. Sci. Instruments*, 1929, 6, 18-19.—A main fork is coupled at the centers of the bobs to what is in effect

a second fork, of the same limb-length but much longer natural period, which may be moved on the main fork by a screw adjustment, according to a calibrated frequency scale. Thus frequency is varied without appreciable alteration of damping or balance.—*H. R. Thompson* (Stanford).

467. Garvey, C. R. List of American psychology laboratories. *Psychol. Bull.*, 1929, 26, 652-660.—Historical data from a questionnaire and a bibliography of 28 titles.—*J. F. Dashiell* (North Carolina).

468. Gehler, P. Theoretische Psychologie. Die Erkenntniswege kausal-realistischer Weltanschauung. (Theoretical psychology. The way to attain a causal-realistic viewpoint of life.) Dresden: Von Zahn & Jaensch, 1928. Pp. 16.—*W. S. Hunter* (Clark).

469. Gurwitsch, A. Phänomenologie der Thematik und des reinen Ich. (Phenomenology of the [mental] content and the pure ego.) *Psychol. Forsch.*, 1929, 12, 279-381.—Dissertation on the relations of *Gestalttheorie* and the phenomenology of the *Gestalt-Qualität*, particularly the relation between the understood (*noematisch*) objects of mental acts and Wertheimer's *Gestalten*.—*W. S. Hulin* (Princeton).

470. Haggerty, M. E. Topics in psychology. Minneapolis: Univ. Minnesota Press, 1929. Pp. 86. \$1.00.—A list of 2584 items culled from 51 sources, mostly textbooks published during the present century. The primary divisions are those of *Psychological Abstracts* somewhat modified. The topics are numbered for reference, and eight checking columns are provided.—*R. R. Willoughby* (Clark).

471. Heider, H. Die Struktur der menschlichen Seele. (The structure of human consciousness.) *Arch. f. d. ges. Psychol.*, 1929, 71, 409-480.—Modern psychology does not accept the notion of consciousness as an indivisible entity, but sees it as a manifold system, recognizes zones or levels, the self as perceiving, as recognizing its existence, as thinking, feeling, acting. The author seeks an analysis of consciousness that has its roots in the developmental process of the conscious life. He recognizes four levels: (1) The original undifferentiated consciousness, which recognizes only the present, the *hic et nunc* in the perception of the objective world. It is probably the simple consciousness of animal life and the earliest in the development of the mental life of the child. It does not disappear as later levels develop, but becomes integrated with these. (2) A level of psychic transcendence, clear consciousness of differentiation and objectivity of the known phenomena; comparison, synthesis and analysis, knowledge of relationships, a three-dimensional consciousness that involves recognition of past and future. (3) A level in which the "I" is discriminated from the objective world. This level functions in the self-expressive, creative function, in the emotional tone as it senses relationship of the outer world to the inner self. (4) The level of the rhythmic, dynamic harmony of the self, sensing of the self as an integrated personality. The author makes a searching analysis of each of these levels, differentiates their functional processes, their relationship to one another, the part they play in the totality of the

integrated personality. He makes a contribution to the Spranger analysis of the *Lebensformen*.—A. B. Herrig (Central State Teachers College).

472. Hill, A. V. *Enemies of knowledge*. *Lancet*, 1929, 216, 1385-1388.—This is a lecture against the anti-vivisectionists. The author gives examples of the many inconsistent and slanderous statements made by members of this society.—W. T. Heron (Minnesota).

473. Hocking, W. E. *Human nature and its remaking*. (Rev. ed.) New Haven: Yale Univ. Press, 1929. Pp. xxvi + 496. \$4.00.—We have instinctive desires which shape the general purposes of life, but since these are often confused and misleading, they need interpretation. This book aims to meet such a need. The instincts are treated at length. These and ideals need much curbing and reshaping in order to fit into a harmonious personality. Otherwise, the free exercise of impulses tends to produce mental disintegration as well as moral inconsistency. In conscience we have a critic of instincts and behavior, and this serves as an instrument for the consistent integration of the personality. Natural impulses are not of themselves good or evil, but they become so with reference to the environment. One should consider these in reference to his general well-being. Sin consists in the neglect to give such consideration. Thus, an act, say of pleasure, is to a human being not simply such, but also an act consistent with a certain ideal. This consistency is what gives it moral value. The remaking of human nature is largely a work of man upon himself. When he is thrust into a world of personal experience and social influences, the inner factors of self-consciousness and moral judgment present a personal view of himself upon which his will acts as a transforming agency. Agreeable experience encourages, while disagreeable ones restrain. Hence, between man and his social environment there is an attitude of give and take in which each transforms the other. The state acts as referee and serves to diminish and regulate the contest. Society cares only for that part of a man which is marketable and for which it has a use. It allows the rest to be wasted; but in the home one finds a place for himself as a whole, where his personal interests may thrive and find encouragement. This private order of life is necessary to one if his marketable qualities are to be maintained. Art supplies a sphere of freedom and achievement in addition to that of the family, while the mission of religion is continuous with art in that it presents an imaginative world independent of reality. Christianity attacks the emotions rather than acts and demands a complete transformation of the instincts, which is not entirely practicable. The decline of Brahmanism and Buddhism suggest that for many, religion demands a god, though the world as we find it gives no proof of his existence.—J. P. Hylan (Stoneham, Mass.).

474. Meltzer, H., & Bailor, E. M. *Developed lessons for psychology, including objective tests with norms*. New York: Harcourt, 1929. Pp. x + 199. \$1.50.—A compilation of questions, suggested readings, and tests covering the scope and methods of

psychology, biological foundations of behavior, unlearned modes of behavior, learning process, and individual differences. The book is offered as a guide to those subjected to the elementary course in psychology. The aim of the authors is to make psychology interesting by having each of the learners go through "an intelligible, humanized, constructive, personal experience."—N. L. Munn (Pittsburgh).

475. Moss, F. A. *Applications of psychology*. Boston: Houghton Mifflin, 1929. Pp. x + 477.—Determining forces in human behavior, individual differences, and professional and industrial psychology are discussed in a popular fashion. The book is essentially the same as *Your Mind in Action* by the same author.—N. L. Munn (Pittsburgh).

476. Murchison, C. [Ed.] *The psychological register*. Worcester: Clark Univ. Press, 1929. Pp. ix + 580. \$6.00.—With the help of Bartlett, Blachowski, Bühler, De Sanctis, Hegge, Matsumoto, Piéron and Schniermann the editor has compiled a list of the important psychologists now living in most of the countries of the world. The data for each psychologist include full name, present address and position, birth date and place, educational and professional career, affiliation with learned societies, and bibliography. The lack of available standards for inclusion in most countries necessitated the omission of many names, which the editor suggests will be considered in the next edition.—R. R. Willoughby (Clark).

477. Pfund, A. H. *A new photometer head*. *J. Opt. Soc. Amer.*, 1929, 19, 387-389.—A method of constructing an essentially perfect photometer head from plate glass is described. One instrument may embody three types of photometer head: (1) equality of brightness, (2) contrast, (3) flicker. The division line in (1) may be made to disappear.—D. B. Judd (Bureau of Standards).

478. Rosett, J. *An apparatus for the induction of muscular relaxation and sleep*. *Arch. Neur. & Psychiat.*, 1929, 22, 737-745.—An apparatus is described the action of which consists in a wave of encircling pressure applied to the periphery of the body and the limbs in the direction of the venous flow.—E. C. Whitman (Boston Psychopathic Hospital).

479. Thomas, M. H., & Schneider, H. W. *A bibliography of John Dewey*. New York: Columbia Univ. Press, 1929. Pp. xxi + 151. \$3.00.—All of Dewey's writings are listed in annual groups from 1882 to 1929. Citations include notices of reprints and reviews and, in the case of books, tables of contents. Nineteen pages are devoted to a list of writings about Dewey. The book begins with a brief essay on Dewey's empiricism by Schneider and closes with a subject-author index.—W. S. Hunter (Clark).

480. Thorndike, E. L. *Granville Stanley Hall, 1846-1924*. *Nat. Acad. Sci., Biographical Memoirs*, 1929, 7, 133-180.—A short account of the life and an evaluation of the work of Hall. Portrait and bibliography of 439 titles.—C. M. Louttit (Hawaii).

481. Trueblood, C. K. A tunnel maze. *J. Genet. Psychol.*, 1929, 36, 581-583.—For the study of orientation of white rats in a rotated maze, a tunnel form is described showing totally enclosed runways and illumination from below.—J. F. Dashiell (North Carolina).

482. [Various.] Essays in honor of John Dewey. New York: Holt, 1929. Pp. 436. \$5.00.—W. S. Hunter (Clark).

483. Walsh, J. J. The mind and the body. *Ohio State Med. J.*, 1929 (August).—R. R. Willoughby (Clark).

[See also abstracts 492, 518, 559.]

SENSATION AND PERCEPTION

484. Anderson, F. N. Comparison of the sense of vibration and of passive movement in organic neurological cases. *Med. Herald & Physiotherap.*, 1929 (August).—R. R. Willoughby (Clark).

485. Bertalanffy, L. Kritische Theorie der Formbildung. (A critical theory of form construction.) Berlin: Gebrüder Borntraeger, 1928. Pp. vi + 243.—W. S. Hunter (Clark).

486. Creed, R. S., & Granit, R. On the latency of negative after-images following stimulation of different areas of the retina. *J. Physiol.*, 1928, 66, 251-298.—The latency, i.e., the time taken for the development of the after-image, is longest in the center of the field of vision, shortens rapidly to a point about 2° from the fixation point, and then increases to a new maximum about 2° or 3° from the fixation point, after which it again decreases. It is suggested that the second maximum is due to the rods replacing the cones as the dominant receptors. Similar effects were obtained with the after-images of discs of various sizes in the center of the field. This furnishes evidence of inhibition of the cone mechanism by the rod mechanism. The factors which influence the length of the latent period are discussed.—H. Banister (Cambridge, England).

487. Dusseldorp, M. Alteraciones del fondo del ojo observadas en enfermos con hipertensión intracraneana, sin papila de éstasis. (Changes in the internal eye noted in patients with intracranial hypertension, without stasis papilla.) *Rev. oto-neur.-oftal.*, 1929, 4, 360-367.—The author reports a number of patients suffering from the symptoms of intracranial hypertension, which were referred to him for ophthalmologic examination. If a swollen condition of the retinal arteries is to be found with or without the presence of congested papillae, we are led to suspect the presence of intracranial hypertension. The technique of Bailliart may be used in this regard to measure the tension of the central retinal artery. If an examination reveals an augmented tension there, such is a definite indication of the presence of an intracranial hypertension, provided of course that there be no concomitant general arterial hypertension, since this latter would also effect a heightened pressure in the retinal artery. The central arterial pressure of the retina is always raised with an increase of the intracranial tension.—J. W. Nagge (Chicago).

488. Fessard, A. Note sur la comparaison de différents modes d'excitation tactile. (A note on the comparison of different modes of tactile excitation.) *C. r. Soc. biol.*, 1929, 101, 1111-1113.—The author wished to replace the various pieces of apparatus used in cutaneous stimulation (sustained contacts, vibrations, brief shocks, etc.) by a unit apparatus furnishing analogous results in different cases. The touch apparatus used was the mirror of Dubois' oscillograph with a frequency of 2,300. The threshold was determined by applying the finger tip lightly to the edge of the mirror. Photographic registration of the mirror's deviation during the contact gave the record of the pressure on the skin and its exact progress in time. Comparisons of this record with the course of the free mirror furnished a means of determining the energy given the tissues during the contact. The author has studied so far linear pressure only, first, for a sudden closing of the current producing a quick, steady compression, and, second, for a gradual diminishing of the phase of constant pressure by means of a Lapique chronaximeter until a single shock was obtained of about one thousandth of a second. He found that the thresholds did not vary until 12 to 15 shocks were obtained. When currents of decreased rate were used, a rise of threshold was found. If we consider only the superficial, slight mechanical stimulation of the skin, these experiments seem to support the theory that the essential factors of tactile stimulation are not static pressure or the corresponding depression, but the parameters of the varying phases and, in particular, the speed of the cutaneous pressure.—Math. H. Piéron (Sorbonne).

489. Gahagan, L. On the absolute judgment of lifted weights. *J. Exper. Psychol.*, 1929, 12, 490-501.—A further study of the method of absolute impression in a lifted-weights experiment. Five subjects compared weights of 84 to 108 grams with a standard of 100. The standard was presented first in every case, followed by one or more comparison weights. Three procedures were used: (1) the standard followed by a single comparison weight; (2) a standard followed by a comparison weight, then by a second comparison weight, likewise to be judged in terms of the initial standard; (3) a standard followed in turn by seven comparison weights. In all three series the subjects were instructed to maintain the stimulus attitude. In the first series 400 judgments were made on every comparison weight; in the second, 100 were made on every comparison weight in each comparison position; and in the third series similarly, 100 judgments were made in each of the seven comparison positions. Limens were calculated by means of Urban's tables. The limens (absolute) of the comparison positions, regardless of the temporal distance from the standard, are similar to the normal limens (relative). The variability of the limens from one comparison position to the next is of the order of that generally found in lifted-weight experiments. Individual differences are found to be large as regards methods and trends of judgment. The writer concludes that introspection is of little value in interpreting this kind of work.—S. Renshaw (Ohio State).

490. Gatti, A., & Dodge, R. Über die Deformation der Haut in einer Reihe von Druckwerten. (Concerning deformation of the skin in a series of pressure values.) *Arch. f. d. ges. Psychol.*, 1929, 71, 481-492.—A study of tactual sensitivity to pressure stimulus, especially with reference to the skin deformation taking place in pressure sensations. The experimentation was limited to an investigation of the sensitivity of the left fore-finger and of the inner surface of the fore-arm. Photographic registration was made and analyses carried on of the curves of deformation. A page of illustrations shows these curves. The authors regard their study as merely introductory to the field, but anticipate that the cause and effect relationship between skin deformation and tactile discrimination of pressure may be discovered through such methods as they use.—A. B. Herrig (Central State Teachers College).
491. Helmoortel, J., Jr., & Nyssen, R. Recherches expérimentales sur la sensibilité à la douleur accompagnant les excitations auditives intenses. Note préliminaire. (Experimental investigations on the sensitivity to pain accompanying intense auditory excitations. Preliminary note.) *J. de neur. et de psychiat.*, 1929, 6, 383-389.—The pain which accompanies intense auditory stimulation disappears after a few seconds, though the intensity of the auditory excitation is not changed. If the auditory stimulation is made in regular intervals the duration of the pain diminishes progressively and may finally disappear entirely. As illustrated on various graphs the curve of the disappearance of pain in such a series of stimulations falls rapidly in the beginning and more slowly later on. If, after the sense of pain has been brought to disappear on one side by a series of stimulations, the other side is stimulated, there is an increased sensibility for pain on the latter side.—H. C. Sys (New York City).
492. Hopwood, F. L. Experiments with high frequency sound waves. *J. Sci. Instruments*, 1929, 6, 34-40.—A discussion of the properties of audible and inaudible sound waves, including a description of an apparatus for showing piezo-electric properties of crystalline quartz. A number of interesting experiments are cited illustrating interference, diffraction and attenuation effects, and also the effects of ultra-sonic vibrations on muscle nerve excitation, on fresh water plants, and on vaccinia virus. By use of suitable apparatus, these same waves will also break up blood corpuscles, liberate dissolved gases, or induce intense local heating.—H. R. Thompson (Stanford).
493. Johns, J. P., & Rowe, A. W. The influence of pregnancy on the visual fields. *Amer. J. Physiol.*, 1929, 90, 402-403.—In an institution for unmarried mothers, records of the visual fields were determined by the Peter campimeter and by the Ferree-Rand perimeter. It is found that in pregnancy there is concentric contraction for both form and color, and an enlargement of the blind spot in the majority of cases studied.—M. J. Zigler (Wellesley).
494. Joseph, —. L'œil humain, ses propriétés optiques et les conditions de la vision distincte. (The human eye, its optic properties, and the conditions of distinct vision.) *Rev. scient.*, 1929, 67, 261-267.—Math. H. Piéron (Sorbonne).
495. Keeler, C. L. The functional capacity of transplanted frog eyes. *J. Exper. Zool.*, 1929, 54, 461-472.—One eye each of 59 frogs was reimplanted and of these 22 healed successfully. Measurements of the action currents from the intact optic nerve indicated that the eye could not function as a visual organ. The tests of Koppányi are shown to be inadequate as a test for restored vision.—O. W. Richards (Clark).
496. Lemcke, F. Was ist Schwerhörigkeit, und was bedeutet sie gegenüber Normalhörigkeit? (What is hardness of hearing and its relation to normal auditory acuity?) *Hilfsschule*, 1929, 22, 601-607.—The author demonstrates that injury to hearing is generally more serious than the restriction of vision. He particularly emphasizes the general moral deterioration of those who are hard of hearing. The ethical behavior and concepts of the blind remain far more intact. A principal task of the special school for physically and mentally handicapped children consists in the removal of deep-seated inferiority feelings. Separate schools for those hard of hearing appear to be imperative.—O. Seeling (Berlin).
497. Lindworsky, J. Zum Problem der Gestalt-täuschungen. (A contribution to the problem of form-illusions.) *Arch. f. d. ges. Psychol.*, 1929, 71, 391-408.—An analysis of existing explanations of geometric-optic illusions, of the findings of the Institute at Köln and of experiments with the Bourdon illusion carried on at the Institute at Prague. The author discriminates between the optic phenomenon itself and the judgment of this phenomenon, and seeks to discover whether the illusion is to be accounted for by the former or the latter. He discusses fully the theories held by various investigators: (1) the judgment theory, (2) the perception theory, (3) the psychic determination theory, (4) the theory of determination according to free localization. Opinion of careful observers and of authors seems to be the effect that judgment does not account for the illusions, that the optical presentation is in itself a different one, the observer in fact seeing a distorted form.—A. B. Herrig (Central State Teachers College).
498. Lombard, W. P. The surface tickle sense of the human skin. *Amer. J. Physiol.*, 1929, 90, 435.—Previously Lombard asserted that tickle and touch are excited at different spots on the skin, but he now states that it is probable that, although certain spots regularly give tickle and others touch sensations, there are many other spots which give rise to tickle and touch or pressure according to the condition of the peripheral and central mechanism at the time of stimulation.—M. J. Zigler (Wellesley).
499. Piéron, H. La sommation superficielle des impressions lumineuses au niveau de la fovea. (Superficial summation of light impressions at the fovea.) *C. r. Soc. biol.*, 1929, 101, 1104-1107.—In the course of certain former experiments, the author thought he had observed in a small number of cases

that the rate of summation in foveal determinations varied according to the state of adaptation. Repeating his experiments with a new method permitting a stricter governing of the centro-foveal fixation in dark adaptation, he obtained results clearly indicating that, when the fixation is definitely in the fovea, the rate of summation remains the same in both states of adaptation. However, when the boundaries of the zone exclusively limited to cones are passed, the intervention of rods brings about an abrupt change in the rate of summation in dark adaptation.—*Math. H. Piéron* (Sorbonne).

500. Tullio, P. *Das Ohr und die Entstehung der Sprache und Schrift*. (The ear and the origin of language and writing.) (Trans. by A. Jelinek.) Vienna: Urban & Schwarzenberg, 1929. Pp. xi + 460. M. 30.—An extensive account of recent labyrinthine investigations. Part I deals with the physical basis of hearing in detail; part II treats of the functioning of the individual members. Tullio claims that the perception of pure tones and clangs occurs in the cochlea, but noises are perceived with the aid of the utricular structures. Injury to the semi-circular canals produces a heightened sensibility of the animal to sound stimuli. Auditory reflexes are considered to demonstrate that the semi-circular canals serve for the perception of tonal direction.—*G. W. Hartmann* (Pennsylvania State).

501. Vassiliev, A. *Développement du concept scientifique de l'espace. II. Les conceptions biologiques et physiques*. (The development of a scientific concept of space. II. The biological and physical conceptions.) *Scientia*, 1929, 46, 289-300.—A more or less chronological résumé of the work of physiologists on the perception of space from the latter part of the 18th century. The topics mentioned are: movement, muscular sensations, semi-circular canals, visual sensations, the evolution of receptors as related to physiological space. Most of the article concerns physics and philosophy.—*R. G. Sherwood* (Redmond, Washington).

502. Von Frey, M. *Zur Theorie der Temperaturempfindung*. (The theory of temperature perception.) *Amer. J. Physiol.*, 1929, 90, 351.—Since warm does not set in promptly upon removal of a cold stimulus, but cold continues to be experienced for some time, Weber's theory is apparently contradicted. Von Frey points out that the requirements of Weber's theory are met if precautions are taken to make sure that warm spots exist in the area of stimulation, and if Holm's guard (*Schutzring*) is used to prevent change in temperature in the area adjacent to the field of stimulation.—*M. J. Zigler* (Wellesley).

503. Wever, E. G. *Beats and related phenomena resulting from the simultaneous sounding of two tones. II*. *Psychol. Rev.*, 1929, 36, 512-523.—In this paper the beats arising from mistuned consonances are considered. The three theories of such beats, the overtone theory, the transformation theory, and the resultant displacements theory, are each discussed in detail. The author, using the resonance theory of audition as a working basis, attempts to account for the analytical powers of the ear, the perception of beats, and beat thresholds, while

the beats of mistuned consonances may be explained by the transformation theory, with due regard for Ohm's law, since these beats are regarded as arising actually from tones of adjacent frequency.—*H. Helson* (Bryn Mawr).

[See also abstracts 509, 523, 528, 551, 552, 557, 704, 705, 708, 715, 761, 766, 805, 857, 910, 918.]

FEELING AND EMOTION

504. Beebe-Center, J. G. *General affective value*. *Psychol. Rev.*, 1929, 36, 472-480.—A method is proposed, using differential weighting which derives the different weights directly from the affective data, so that affective stimuli may be measured or ordered. The method is essentially an application to the field of affection of the procedure of tetrad differences used by Spearman for the determination of a general intelligence factor in mental tests. The method given not only results in a ranking of affective stimuli, but also suggests a means of distinguishing between the esthetically sensitive and the esthetically dull. The esthetic sensitivity of individuals to a set of objects could be considered, according to the method proposed, a function of the correlation between the affective values assigned by him to the objects and their general affective values, the latter being determined from the judgments of all subjects.—*H. Helson* (Bryn Mawr).

505. Fulton, J. F., & Ingraham, F. D. *Emotional disturbances following experimental lesions of the base of the brain*. *Amer. J. Physiol.*, 1929, 90, 353.—Clinical cases have hitherto been reported in which changes in behavior are associated with lesions at the base of the brain. Playful kittens were selected as fit subjects for an experimental test of this clinical finding. After operation at the base of the brain, the kittens responded to gentle stroking by spitting, scratching, and biting, accompanied by diffuse discharges from the sympathetic nervous system. The authors believe that, as a result of the experimental lesion, the hypothalamic centers are released from the normal cortical control.—*M. J. Zigler* (Wellesley).

506. Odebrecht, R. *Gefühl und Ganzheit. Der Ideengehalt der Psychologie Felix Kruegers*. (Feeling and totality. The ideas contained in Felix Krueger's psychology.) Berlin-Steglitz: Juncker & Dünhaupt, 1929. Pp. 44. M. 2.00.—This article aims to give a condensed exposition of Felix Krueger's theory of feeling, which the author believes to be of great significance for the development of modern psychology as well as for the deepening of philosophical problems. Feeling in this psychology is considered as the whole character of the qualitatively complex totality of experience, whence is derived its unusual qualitative richness, above all its depth and its fundamental significance in the adaptable nature of experience. The author discusses further the all-inclusive concept of the psycho-physical structure, and attempts by means of esthetic, logical and epistemological views to give an idea of the fertility of the ideational content presented.—*E. Odebrecht* (Berlin).

507. Roalfe, W. R. The psychology of fear. *J. Abn. & Soc. Psychol.*, 1929, 24, 32-40.—Psychologically as well as biologically, fear is a warning of danger to the life impulses; but psychologically it is always the sign that the urge of life within is demanding expression. This is why psychoanalysis devotes itself to the study of those things which impede this expression. The psychoanalyst devotes himself to the task of removing the débris which is found in the mind of his subject. To him, fear is a potentiality which must be converted into an asset instead of a liability.—C. H. Johnson (Boston Psychopathic Hospital).

508. Von Wyss, W. H. Der Ausdruck der Gemütsbewegungen. (The expression of the emotions.) *Nervenarzt*, 1929, 2, 533-538.—Expression today is a primary unique function, not derivable from others as Darwin thought. The expression actualizes the impulsive experience of the expressed emotion. With this falls the doctrine of the elementary emotions. Every emotion has a definite coloring of pleasantness-unpleasantness but is not to be identified with it.—G. W. Hartmann (Pennsylvania State).

[See also abstracts 711, 777, 865, 917, 925.]

ATTENTION, MEMORY AND THOUGHT

509. [Anon.] Imagery of the blind. A bibliography. *Teach. Forum*, 1929, 2, 13.—A bibliography of 27 titles on the imagery of the blind. All of the references are in the Foundation library.—H. S. Clapp (Children's Court, New York).

510. Bouligand, G. L'intuition mathématique. Son mécanisme, ses aspects variés. (Mathematical intuition, its mechanism and various aspects.) *Rev. scient.*, 1929, 67, 289-294.—*Math. H. Piéron* (Sorbonne).

511. Ghosal, S. C. On the waste involved in postponing the fixing of meaningful associations. *Indian J. Psychol.*, 1929, 4, 68-71.—Experiments involving the learning of stanzas of poetry indicate that if learning is postponed from the time when meaningful associations are set up to a subsequent day, there is a greater waste of time and effort owing to the weakening of meaning. In teaching it is desirable to see that material is learned thoroughly as soon as meaning has been imparted to it and not left to be done subsequently at home.—F. A. Geldard (Virginia).

512. Greene, E. B. Achievement and confidence on true-false tests of college students. *J. Abn. & Soc. Psychol.*, 1929, 23, 467-478.—The purpose of this study was to ascertain the consistency of the use of self-confidence ratings on answers to true-false tests by college students. Two groups of sophomores and juniors reported their self-confidence by marking a symbol on each test item. One group used three degrees of confidence on daily and mid-year tests in the elementary psychology course, and the other group used two degrees of confidence on three special tests: immediate memory, same-opposite, and miscellaneous information. The results indicate that the average amount of confidence had a fairly constant relation to the average proportion of

right answers. Simple untechnical language probably served to raise the amount of confidence per unit of information. On the whole, the ratings of "fairly sure" and "doubtful" were used more consistently than the rating of "very sure." The highest quarter of students, as indicated by a Thorndike mental test, had a reliably smaller amount of confidence per unit of information than the lowest quarter of students. The comparison of immediate and delayed or review tests shows that the lowest quarter of students tended to lose their connection between knowledge and confidence more quickly than the better students.—C. H. Johnson (Boston Psychopathic Hospital).

513. Joesten, E. Eidetische Anlage und bildnerisches Schaffen. (The eidetic aptitude and creative accomplishment.) *Arch. f. d. ges. Psychol.*, 1929, 71, 493-539.—The author attempts to ascertain whether persons of artistic talent are gifted with greater eidetic imagery than those not so talented. Her investigation was carried on with thirteen sculptors and seven painters. She used for her material colored pictures, silhouettes and line figures, and also studied the spontaneous optical presentations. She found no marked eidetic ability manifested by the members of the group, but did find unusual imagery ability, both of the visual reproductive type and of the abstract creative type. Spontaneous optical recall showed itself in a number during childhood years. She followed this with a study of the preliminary sketches made by artists and their manner of procedure in the conception of their ideals. It was found that in almost all cases the artist gives evidence of a previous concept visually present, with some more definitely visualized in concrete form than with others.—A. B. Herrig (Central State Teachers College).

514. Latta, R., & Macbeath, A. The elements of logic. New York: Macmillan, 1929. Pp. viii + 393. \$2.00.—This textbook aims to cover the subject of scientific method briefly and concretely, and in addition, to serve as an introduction to advanced study in this field. The discussion of deductive processes is taken up in the latter part of the book.—H. S. Clapp (Children's Court, New York).

515. Stoke, S. M. Memory for onomatopoeies. *J. Genet. Psychol.*, 1929, 36, 594-596.—A test of memorizing words heard shows that onomatopoeies have less mnemonic value than concrete words and more than abstract words, both at 5th and 6th grade and at college level.—J. F. Dashiell (North Carolina).

[See also abstracts 458, 724, 807, 852.]

NERVOUS SYSTEM

516. Campion, G. G. The thalamo-cortical circulation of neural impulse: a new integration of thalamo-cortical functioning. *Brit. J. Med. Psychol.*, 1929, 9, 203-216.—The author advances the opinion that in the future the conception of a thalamo-cortical circulation of neural impulse will be as fundamental for the physiology of what we colloquially call "thought" as the conception of the circulation of the blood is for modern physiology. An analogy is drawn between the development of

adventitious buds in trees that have been cut back or pruned and the reappearance of apparently forgotten associations during impairment through illness, in aphasic states, or in senility. These, according to the author, are all explicable on the view that earlier and partly discussed levels of functioning (in the thalamus) come into activity again when higher and later ones (in the cortex) fail.—*M. B. Jensen* (Michigan Central State Teachers College).

517. **Downs, W. G., Jr., & Goss, C. M.** The presence of nerve fibres in the dentinal tubules of mammalian teeth. *Proc. Soc. Exper. Biol. & Med.*, 1929, 27, 64-65.—By means of pyridine fixation, the Cajal technique of silver impregnation, and careful grinding, writers have shown evidence that the dentinal tubules contain definite, unmyelinated fibers.—*H. R. Thompson* (Stanford).

518. **Fearing, F.** Reflex action: a study in the history of physiological psychology. Baltimore: Williams & Wilkins, 1929. Pp. 336. \$6.50.—The conception of the reflex has become so fundamental in modern theorizing in the field of psycho-biology and behavior as to warrant a critical reexamination of the development of the principle and the data on which it is based. The present book approaches the problem from the point of view of the historical antecedents of the reflex arc concept. For purposes of convenient discussion the historical development of the reflex arc concept has been divided into five stages: (1) The pre-scientific period (until the 17th century): This includes everything until the advent of Descartes in the 17th century. No attempt is made in the present volume to examine the conceptions of neuro-muscular action of the Greek and Roman physicians and philosophers or the psycho-biological theories of the Middle Ages. (2) The speculative period: This covers the period from 1650 to 1750 and includes the era beginning with the description of involuntary action by Descartes and ending with the publication in 1751 of Robert Whytt's book on involuntary motion in man and animals. Although Descartes and others used the term "reflex," the word did not come into general scientific usage at this time. (3) The beginning of experimentation: The eighty years which began with the work of Whytt in 1750 and extended to the work of Marshall Hall in 1831 are characterized as a period in which there was a certain amount of crude experimentation in the field of reflex function and in which the word "reflex" came into general scientific use. The conceptions of mechanistic physiology show a parallel development, particularly as they were extended by such investigators and theorists as La Mettrie, Unzer, Prochaska and Blane. (4) The period from 1832 to 1906 was marked by the researches of Charles Bell and Marshall Hall. The work of the former served to clarify the functional relationships of the sensory and motor portions of the reflex arc, and that of the latter established the principle of reflex action as a fundamental conception in the fields of physiology and medicine. During the second half of the 19th century there developed a controversy regarding the psychical processes in the spinal cord. This controversy repre-

sented a reaction against the mechanistic physiological psychology of the 18th century and resulted in an immense amount of experimental investigation in the field of spinal cord functions. A large number of separate reflex mechanisms were demonstrated. (5) The publication in 1906 of Sherrington's work on the integrative action of the nervous system marked the change from the hypothesis which regarded the reflex as a simple stimulus-response sequence to that which considers it as an integrated unit in the adjustive activities of the organism. This is the characteristic feature of the modern conception. The first eleven chapters are devoted to the discussion of the historical development of the reflex arc concept. The various stages of this development, although arbitrarily delimited, demonstrate the gradual emergence of the concept of the reflex from the earlier conception of involuntary action. The discovery of a large number of simple, more or less invariable stimulus-response sequences in the organism tended to establish the hypothesis that the animal, considered behavioristically, was but a concatenation of mechanical reflexes. It is made clear that this conception was based primarily upon results of experiments on artificially isolated segments of the nervous system. The consideration, however, of the results of investigations in the fields of inhibition, integration, and the various complex forms of response in the intact organism has resulted in a certain skepticism as to the universal applicability of the reflex doctrine. The discussion of these topics together with the presentation of the history of the experimentation on and theory of the tendon reflexes and postural reflexes occupies the last five chapters of the book. The thesis is developed that, from the point of view of physiological psychology, we are concerned with the reflex act as a part of the total response pattern of the functioning organism, rather than with the analysis of the functional components of the isolated reflex arc. From this point of view experimentation will not be concerned primarily with the analysis of the latencies of the various hypothetical components, the form of the galvanic response of the muscle, etc., but, on the contrary, will proceed to the examination of the reflex in relation to all the concomitant events in the integrated nervous system.—*F. Fearing* (Northwestern).

519. **Forbes, A., & Rice, L. H.** Fatigue in peripheral nerve. *Amer. J. Physiol.*, 1929, 90, 119-145.—High frequency stimuli were applied to a peripheral nerve by a special apparatus, described by Campbell. Action current records were made during the period of stimulation. The successive responses gradually became smaller, being most apparent in the first quarter of a second but to a noticeable degree for many seconds. In order to determine that this phenomenon is produced, not by a local "stimulation fatigue," but by reduced efficiency of the nerve to conduct impulses, the stimuli were shifted to a different pair of electrodes with the same result. This result harmonizes with the finding of Field and Brücke that under prolonged stimulation the refractory phase of a nerve becomes longer, and of Gerard that the rate of oxygen con-

sumption and heat production declines during stimulation of a nerve. These results point to a change in the long-accepted belief that a peripheral nerve is unfatiguable.—*M. J. Zigler (Wellesley)*.

520. Mansfield, G., & Lanczos, A. *Erregbarkeit und wirkliche Erregungsgrösse des Nerven und die Ungültigkeit des alles oder nichts Gesetzes der Erregung.* (Excitability and genuine increase in excitation of nerves and the invalidity of the all-or-none law of excitation.) *Amer. J. Physiol.*, 1929, 90, 446.—The authors claim to have demonstrated that the all-or-none law of nerve excitation is incorrect. By narcotizing a stretch of nerve and taking galvanometric reading of the size of the action current to maximal mechanical stimulation in the narcotized and in the uninjured parts of the nerve, distinct differences in the magnitude of reactions were recorded.—*M. J. Zigler (Wellesley)*.

521. Pavlov, I. P. *Inhibition in the normal activity of the cerebral hemispheres.* *Amer. J. Physiol.*, 1929, 90, 468.—Normally, inhibition plays the double rôle of protecting the cortical cells from very strong stimulation and from useless work. The introduction of bromides increases inhibition, and is suggested as an indicator of the presence of inhibition in a given nervous process.—*M. J. Zigler (Wellesley)*.

522. Poppi, U. *A propos des connexions pédonculo-tegmentaires.* (On the pedunculo-tegmental connections.) *J. de neur. et de psychiat.*, 1929, 6, 343-345.—In discussing his own work on the mesencephalic structures in relation to studies published by Rongé, the author emphasizes the need of a standardization of terminology for the fibers and nuclei of the central nervous system. He considers the nomenclature of Marburg's atlas to be especially practical and suggests that its consistent use might eliminate many misunderstandings.—*H. C. Syz (New York City)*.

523. Rizzolo, A. *Cold stimulation of a peripheral region and the excitability of the cerebral cortex.* *Brit. J. Med. Psychol.*, 1929, 9, 258-262.—A report on the excitability of the cerebral cortex of the dog after plunging the right anterior limb of the animal into water at from 12° to 1° C. Measurements of excitability were in terms of chronaxy, using discharges of condensers expressed in microfarads. 22 animals were used. The stimulation of the right anterior limb modified the excitability of the cerebro-cortical motor point corresponding to the region stimulated, decreasing the original chronaxy in some instances and increasing it in others; repeated stimulations may affect the excitability more markedly; optimum motor points other than those corresponding to regions stimulated may also be affected. "In general it may be stated that given a temperature sufficiently low and allowing the factor of time to intervene, cold stimulation of a peripheral region of the body first increases the excitability of the part of the cerebral cortex corresponding to the region stimulated and later decreases it."—*M. B. Jensen (Michigan Central State Teachers College)*.

[See also abstracts 457, 505, 563, 610, 717.]

MOTOR PHENOMENA AND ACTION

524. Allen, B. M. *The functional difference between the pars intermedia and pars nervosa of hypophysis of frog.* *Proc. Soc. Exper. Biol. & Med.*, 1929, 27, 11-13.—An experiment to determine the effect of homoplastic transplantation of different portions of the hypophysis of adult frogs into tadpoles. A table is given showing the sizes of shadows cast by vertical illumination of tadpoles after implantation of pars anterior, intermedia and nervosa. Author concludes that the data indicate a specific influence of pars nervosa on distention of body wall.—*H. R. Thompson (Stanford)*.

525. [Anon.] *Fatigue and exhaustion.* *Lancet*, 1929, 216, 726-727.—No attempts to elicit objective signs of nervous exhaustion have met with great success. Biochemical tests offer the most hopeful line of advance. There is evidence of diminished sugar tolerance, an increase of organic phosphorus in the urine, an increase in the amount of adrenalin, and a change in the gonadal hormones.—*W. T. Heron (Minnesota)*.

526. [Anon.] *Conditioned reflexes.* *Lancet*, 1929, 216, 829-830.—An enthusiastic account of conditioned reflexes based on the translation by Gantt. Pavlov has explained the phenomenon of sleep in a manner more consonant with the facts than any previous hypothesis. It is believed that his results are of great value to the psychopathologist and neurologist.—*W. T. Heron (Minnesota)*.

527. Aryamov, Y. A. [General principles of reflexology.] (5th ed.) Moscow: Rabotnik Prosveshchenia, 1928. Pp. 198.—*W. S. Hunter (Clark)*.

528. Fox, J. C., & Dodge, R. *Optic nystagmus. II. Variations in nystagmographic records of eye movements.* *Arch. Neur. & Psychiat.*, 1929, 22, 55-74.—Nystagmograms were taken by a mirror eye-movement recorder resting over the cornea on the lid of a closed eye. Certain characteristic variations in the nystagmographic records of eye movements arose as a consequence of winks, tremors of the eyelids, pulse, head movements, and fatigue. Certain characteristic deviations from the normal picture of optic nystagmus occurred in certain disorders of the nervous system, e.g., cerebellar disorder of fixation in a case of multiple sclerosis, etc.—*E. C. Whitman (Boston Psychopathic Hospital)*.

529. Gemelli, A. *Recherches sur le diagnostic de l'habileté motrice.* (Experiments on determination of motor skill.) *Rev. de la sci. du travail*, 1929, 1, 181-197.—The article deals with the author's comparative research on the use of analytic tests and analogous synthetic tests for the determination of motor skill. He used two groups of workers. The first group worked in a textile mill, observing a certain number of bobbins and spindles and intervening whenever a thread broke. The other group worked in a shoe factory at the very delicate task of shaping shoes. The results from certain simple motor tests given these two groups showed the uneven value of the tests, while results from some complex tests patterned after certain of the textile workers' operations gave very high correlations, permitting the factory to

make excellent psychotechnical selections. The study of the apprentice curve gave equally useful information. The motor tests used were: Moede's impulsimeter, accuracy of movement (Whipple's steadiness tests, I and II), dotting, tapping, the disc test (from the J. J. Rousseau Institute at Geneva), Kraepelin's bead test, the disc test with points, the pegboard test, the dynamometer, the test for diffused attention, and a reaction time test. The author added four analogous tests constructed so as to imitate certain characteristic phases of the work. The author concludes, first, that it cannot be said that analytical tests do not fit the end of selection; second, that no motor test is satisfactory for determining manual ability; and that, consequently, we cannot speak of a general motor ability. The psychotechnical problem should be studied for each trade in order to find out whether there are analytical tests applicable to the special skill necessary for that trade.—*Math. H. Piéron* (Sorbonne).

530. Hull, C. L. A functional interpretation of the conditioned reflex. *Psychol. Rev.*, 1929, 36, 498-511.—The conditioned reflex is a two-phase phenomenon, the primary being excitatory, the secondary inhibitory. Redintegration is one of the aspects of the primary phase; but without experimental extinction, by which irrelevant stimuli fail to evoke responses, behavior would become a chaos. The simple addition-subtraction relationship obtaining among the components of a conditioned reflex stimulus is a fairly adequate approximation for many life situations, although innumerable life situations arise where simple addition or subtraction of the potencies of the several components of a stimulus complex is not adequate. Conditioned inhibition meets the question of sensitivity to the patterning of a stimulus. Irradiation explains the primitive tendency for stimuli like the original stimulus to call forth a response. Differential inhibition keeps the irradiation mechanism from behavior chaos, so that the two working together bring about a most excellent adaptive state of affairs. The anticipatory tendency which appears in conditioning experiments will be found to be intimately connected with the "short circuiting" found in more complex forms of learning. The problem of the conditioned defense reaction is pointed out as opening up a field of study.—*H. Helson* (Bryn Mawr).

531. Ichok, G. [Exertion, fatigue, and reserve.] *Arch. Med. Cir. y Especialidades*, 1929 (August 17).—*R. R. Willoughby* (Clark).

532. Lee, M. A. M. The effect of fasting on the knee jerk, standing steadiness, and the salivary reflex. *Amer. J. Physiol.*, 1929, 90, 184-193.—The knee jerk was clearly reduced in eleven of fourteen subjects who submitted to a fast of five days. A tendency to decrease in extent of knee jerk was manifested in the other three subjects. In the Romberg steadiness test, six fasting subjects showed greater steadiness than before or after the fast. The amount of salivation was reduced during the period of fasting. To explain the difference between the effect of fasting upon the knee jerk test and the steadiness test, the author points out that the former seems to depend

largely upon muscles which reduce considerably during the fast, while the latter depends upon the height of the reflex threshold of protopathic sensations, which is lower in the fasting period.—*M. J. Zigler* (Wellesley).

533. Liddell, H. S., Anderson, O. D., & James, W. T. An examination of Pavlov's theory of internal inhibition. *Amer. J. Physiol.*, 1929, 90, 430-431.—Results of a study of conditioned reflexes in sheep fail to support Pavlov's conception of sleep as summation and irradiation of internal inhibition.—*M. J. Zigler* (Wellesley).

534. McCouch, G. P., & Alpers, B. J. Extensor reflexes from the knee in relation to the knee jerk and to rebound. *Arch. Neur. & Psychiat.*, 1929, 22, 672-685.—Evidence is presented of the existence of an ipsilateral extension reflex which may be elicited from the subpatellar bursa by either mechanical or electrical stimulation. It is suggested that this reflex may contribute to the knee jerk as tested clinically and that impairment of this component may alter the response to a degree which may lead to errors in diagnosis.—*E. C. Whitman* (Boston Psychopathic Hospital).

535. Nathanson, Y. S. A conceptual basis of habit modification. *J. Appl. Psychol.*, 1929, 13, 469-485.—A report on experiments based upon those performed by Twitmyer in 1918. Twitmyer is said to have succeeded in removing certain habitual acts which were "below the threshold of consciousness" by lifting their performance "into the field of volitional processes." The method consisted in making the patient keep count of the number of acts (snapping of fingers, toes and ankles, in the case of an 18-year-old girl; throat noises in the case of a 10-year-old boy, etc.). After two weeks of carefully kept record, the data of the record showed either a very substantial decrease or total disappearance of such involuntary acts as snapping of fingers, throat noises, nail biting, pseudo-tics, etc. According to the writer, the method was effective in the case of a 10-year-old supposed kleptomaniac.—*D. L. Zieve* (New York City).

536. Nicolau, I., & Antinescu-Dimitriu, O. Rôle des réflexes conditionnels dans la formation des anticorps. (The rôle of conditioned reflexes in the formation of antibodies.) *C. r. Soc. biol.*, 1929, 102, 133-134.—The authors repeated the experiments of Metalnikov and Chorine, not confirmed by Ramon, on the rôle of the conditioned reflex in different phenomena of immunity. Their experiments, performed on 15 rabbits, confirmed Metalnikov and Chorine's results on tactile and thermal stimulation. The agglutinant character of the serum in the tested animals doubled and tripled the amount determined before the stimulation and the amount in the control animals. However, the experimenters were unable to get similar results with auditory stimuli.—*Math. H. Piéron* (Sorbonne).

537. Nicolau, I., & Antinescu-Dimitriu, O. Réflexe conditionnel et formule leucocytaire. (The conditioned reflex and the leucocyte formula.) *C. r. Soc. biol.*, 1929, 102, 135-136.—The article describes a repetition of the experiments of Metalnikov and

Chorine on the leucocyte formula. Five rabbits, the leucocyte formula of which had been previously determined, were subjected to thermal stimulation for three weeks, being given at the same time intraperitoneal injections of two c.c. of an emulsion of cholera vibrios extracted by heat. The animals were allowed to rest for three weeks, and the leucocyte formula was then retaken. The thermal stimulation was repeated on four animals, the fifth serving as a control. All five animals were subjected to tactile stimuli in a second series of experiments, and later to auditory stimuli. These researches confirmed the results obtained by Metalnikov and Chorine on auditory excitations, which were the only ones they studied. In their experiments with thermal and tactile stimuli, the authors obtained an increase of the number of pseudoeosinophils at the expense of the lymphocytes.—*Math. H. Piéron* (Sorbonne).

538. Nicolau, I., & Antinescu-Dimitriu, O. L'influence des réflexes conditionnels sur l'exsudat péritonéal. (The influence of conditioned reflexes on the peritoneal exudate.) *C. r. Soc. biol.*, 1929, 102, 144-145.—Metalnikov and Chorine discovered the fact, later verified by Vigodehikoff and Mme. Barykine, that the number of leucocytes increases in the peritoneal exudate under the influence of conditioned reflexes, and that there is, moreover, a definite increase in the percentage of polynucleates. The authors repeated the experiments on 10 guinea pigs, 5 with thermal stimulation and 5 with tactile. At the same time and for comparison they studied the cytological modifications in the peritoneal exudate of normal guinea pigs injected with the same emulsions without any accompanying stimuli. They obtained the same results as Metalnikov in animals subjected to conditioned reflexes, but since they obtained nearly identical results with the control animals, they were forced to admit that these modifications were of a local nature and were due to the abdominal punctures made for obtaining the exudate and not to the influence of the conditioned reflex.—*Math. H. Piéron* (Sorbonne).

539. Quigley, J. P., Johnson, V., & Solomon, E. I. Action of insulin on the motility of the gastro-intestinal tract. *Amer. J. Physiol.*, 1929, 90, 89-98.—The contractions of the stomach were recorded by the triple balloon method. It was found that sensations of hunger pangs coincide with activity in any part of the stomach, although most frequently activity in the pylorus is correlated with these sensations. Subcutaneous injection of insulin in fasting subjects produces, after an interval of about an hour, an increase in gastric tone and contractions of the stomach musculature. These gastric changes are accompanied by sensations of hunger, which are similar to those which occur in states of hunger excited in the normal way.—*M. J. Zigler* (Wellesley).

540. Salmon, A. Nouvelles observations cliniques et expérimentales sur les mouvements automatiques qui suivent les efforts musculaires volontaires. (Recent clinical and experimental observations on automatic movements following voluntary muscular effort.) *Rev. neur.*, 1929, 36, 428-438.—These phenomena, which are observable in healthy subjects,

consist in the fact that if resistance is opposed to a very energetic and prolonged voluntary movement of certain muscles, there is observed, one or two moments after the muscular relaxation, an automatic repetition of the initial movement, the subject always having the feeling that his limb has become lighter or that he is flying. The phenomena are very much accentuated in emotional subjects, hysterical cases, and intellectual individuals. The author thinks that these phenomena of automatism constitute an example of medullary automatism, of a latent spinal automatism which persists in the mechanism of all voluntary acts.—*Math. H. Piéron* (Sorbonne).

541. Sanderson, S. Intention in motor learning. *J. Exper. Psychol.*, 1929, 12, 463-489.—An experiment on the influence of intention or mental attitude in learning to trace a stylus maze and a number sheet, patterns of which were identical. "The particular intention desired was instilled in the subject by specific instructions." The intention selected for study was "that mental set in which the subject should devote his attention to the learning of the pattern." Control or speed groups, and experimental or pattern groups of subjects were compared.—*S. Renshaw* (Ohio State).

542. Toulouse, Ed. Les glandulaires. (Glandular disturbances.) *Prophyl. ment.*, 1929, 6, 31-34.—The author discusses the rôle played by glands in retarded and mentally arrested cases.—*Math. H. Piéron* (Sorbonne).

543. Travis, L. E. The relation of voluntary movements to tremors. *J. Exper. Psychol.*, 1929, 12, 515-524.—The fingers when extended show a tremor of 8 to 12 movements per second. The problem was to describe the relation of voluntary movement to tremor. Three optical levers (Dorsey phonelescopes) were mounted so as to record photographically time, voluntary movement of a finger, and tremor. Finger depression proved either a continuation of the descending phase of a tremor or an interruption of an ascending phase. About 75% of elevations or depressions of either or both forefingers were of the first type, so the writer concludes that "a voluntary movement is, in most instances, a continuation of a tremor, and does not interrupt the tremor rhythm." Studies of three hemiplegics support the view that tremor is of cortical origin. "It appears that reaction time depends upon the temporal relation of the stimulus to the tremors and that the maximal rate of repeated voluntary movements of any given part of the body is limited by the tremor rate."—*S. Renshaw* (Ohio State).

544. Volborth, G. W. The nature of the inhibitory process and the identity of all kinds of inhibition in conditioned reflexes. *Amer. J. Physiol.*, 1929, 90, 546-547.—Evidence is presented in support of Pavlov's contention that inhibition is produced by a special state capable of connecting with any stimulus to form conditioned reflexes. It is suggested that such responses as involve inhibition be termed negative conditioned reflexes to distinguish them from positive conditioned reflexes, in which activity is initiated by the stimulus.—*M. J. Zigler* (Wellesley).

545. Wallon, H. *L'habileté manuelle*. (Manual skill.) *Rev. de la sci. du travail*, 1929, 1, 217-232.—Manual skill depends upon numerous factors which are largely physiological: the support furnished the hand by other parts of the body, the degree of contraction of the muscles in repose, the proper selection of useful movements with the progressive elimination of the mass movements which characterize the beginning apprentice, the control of movements by internal sensations, coordination between visual perceptions and movements, unconscious regulation of movements by sensations of compensation and equilibrium, intellectual aptitude, which is opposite to automatism and assures a motor interpretation of the object and its correct use, and, finally, the action of images which can aid or hasten the correct execution of the proper movements. Analytical tests for investigating every factor should be used in professional orientation in order to find out the probable development of the tested adolescent.—*Math. H. Piéron* (Sorbonne).

546. Wetmore, R. G., & Estabrooks, G. H. The relation of left-handedness to psycho-neurotic traits. *J. Educ. Psychol.*, 1929, 20, 628-629.—No relation was found between left-handedness and psycho-neurotic traits as measured by Laird's Personal Inventory B2. A group of 62 students who were totally left-handed or ambidextrous, or who had a tendency toward using the left hand was studied, together with an equal number of right-handed men.—*J. A. McGeoch* (Arkansas).

547. White, M. M. Relation of bodily tension to electrical resistance. *Proc. Okla. Acad. Sci.*, 1929, 9, 165-171.—Electrocardiographic records were taken under conditions of relaxation, tension of all the voluntary muscles, squeezing a dynamometer with one hand, and doing mental multiplication. Records were taken over 10-minute periods in each case. In general, a higher electrical resistance was found in relaxation than in tension, and general contracture differed more from general relaxation than did local contracture. It follows that the factor of tension is highly important in the interpretation of data from experiments on the electrical resistance of the body.—*J. A. McGeoch* (Arkansas).

548. Williams, K. A. The conditioned reflex and the sign function in learning. *Psychol. Rev.*, 1929, 36, 481-497.—The use of the concept of reflex and conditioning by Pavlov, Bekhterev, Watson, Allport, Smith and Guthrie is pointed out by the author, as well as criticism of both. The line of criticism which would question the adequacy of the concept of conditioning to describe what actually occurs is developed by examining a case of learning in detail to see whether the facts really fit the conditioned reflex scheme. Rats, in learning, "do not make the same movements in the sense demanded by the conditioned reflex interpretation, or even a weak copy of them. They make a new set of movements . . . there being no response made to an unconditioned stimulus which can be considered identical with the conditioned response, a fundamental assumption in the theory under consideration." Further analysis of responses reveals that if there are any responses to

which the attachment of new stimuli can be adequately explained by the conditioned reflex principle the most promising place to look for them is among certain isolated responses, defined by the author, which fact restricts the range of applicability of the principle considerably. Stimuli initiating preparatory responses may be called signs. Many of the cases of learning explained by the conditioned reflex theories are now seen to be cases where the stimuli were signs and the responses preparatory. Objections to the present analysis are raised and answered.—*H. Helson* (Bryn Mawr).

[See also abstracts 478, 549, 799.]

PLANT AND ANIMAL BEHAVIOR

549. Combemale, P. Sur la psychophysiologie du chien privé de testicules. (On the psychophysiology of the castrated dog.) *C. r. Soc. biol.*, 1929, 101, 1133-1135.—The author compared two normal dogs with two castrated ones, age two years and one and a half years, castrated at the age of one month. The difference, which was already marked at 6 months, was greatly increased at 9 months. Memory and attention were not affected, but watchfulness was diminished. The castrated dogs were less mischievous than the normal ones, more easily disturbed, less jealous, more fearful, and of a more even temper. They played with each other but not with the normal dogs, playing quieter games. The normal dogs possessed a love of liberty, a taste for adventure, and a personality having powerful interests, while the castrated ones were abulic.—*Math. H. Piéron* (Sorbonne).

550. Combes, Mme. Nouvelles observations sur l'extinction du feu par un nid de *Formica rufa* L. (Recent observations on fire extinguishing by a nest of *Formica rufa* L.) *Bull. Soc. entom. Fr.*, 1929, No. 12, 201-202.—The author had previously observed (see III: 176) that ants would extinguish a fire on their ant-hill approaches and would attack and extinguish a lighted taper placed on a brick. Wishing to find out whether ants taken away from their habitat would act in the same manner, she constructed artificial ant-hills. She found that the same technique was repeatedly used. The ants came in great numbers to eject formic acid on the flame, extinguishing in turn a wax night-light, a small taper, and an ordinary candle.—*Math. H. Piéron* (Sorbonne).

551. Corbeille, C. L'influence des vibrations acoustiques sur la respiration chez la grenouille et certains mammifères. (The influence of acoustic vibrations on respiration in the frog and certain mammals.) *C. r. Soc. biol.*, 1929, 101, 113-115.—The author studied the effect of acoustic vibrations of 100 d.v. to 8000 d.v., given by means of a Cambridge vibrator. The first group of tests was performed on 5 Florida frogs for a period of one to two hours. The sound caused a respiratory retardation for the period of its duration, but short, repeated sounds caused acceleration. In another group of frogs, decerebrated above the optic lobes, the same results were obtained. Therefore, the conclusion can be drawn that the acoustico-respiratory

reflex does not depend upon the cortex.—*Math. H. Piéron* (Sorbonne).

552. Corbeille, C. L'influence des vibrations acoustiques sur le rythme cardiaque de lapins intacts ou décérébrés. (The influence of acoustic vibrations on the cardiac rhythm of rabbits, normal and decerebrated.) *C. r. Soc. biol.*, 1929, 101, 563-564.—93 experiments were made on 21 normal rabbits placed near an oscillator, and their electrocardiographic records were taken. The author always found a retardation of the heart-beat under the effect of the acoustic stimulation. However, if this stimulation lasted from 15 sec. to 1 min., 5 sec., the effect ceased, and the rhythm returned to normal. After the stimulus ceased, there was often a slight secondary retardation. For decerebrated rabbits (36 experiments) the acoustic stimulation was found to be inefficacious in 60% of the cases. In the remaining 40% there was cardiac acceleration in place of retardation, while the respiratory reactions were unchanged. This result would suppose a bulbar reflex pathway.—*Math. H. Piéron* (Sorbonne).

553. Hecht, S., Wolf, E., & Wald, G. D. The visual acuity of insects. *Amer. J. Physiol.*, 1929, 90, 381-382.—Using a method by which the visual acuity of animals other than man can be determined from their responses to a movement in their visual field, the authors find that the maximum visual acuity of the bee and *Drosophila* is in both instances lower than the lowest human acuity. The resolving power of the human is about 100 times that of the bee eye, and over 1000 times that of *Drosophila*.—*M. J. Zigler* (Wellesley).

554. Howard, S. F. Synchronous flashing of fireflies. *Science*, 1929, 70, 556.—Attention is called to a report of the synchronous flashing of fireflies mentioned in an article by Brokenshire, *Through Philippine Jungles*, in the *Missionary Herald*, 1929 (Sept.).—*J. C. Spence* (Clark).

555. Hsiao, H. H. An experimental study of the rat's "insight" within a spatial complex. *Univ. Calif. Publ. Psychol.*, 1929, 4, No. 4, 57-70.—A group of rats were trained on a simple maze in which there were three routes to the food box, two of them having a final common path and being much shorter than the third. The long route also differed from the others in that it led in its initial course in an entirely different direction. It entered the same food box as the shorter routes with the final common path but it did so from a different side. Swinging wire mesh doors which could be locked by the experimenter and which could be manipulated by the rat were placed in the alleys so that a particular route might be blocked. After preliminary training during which the rats learned, in a simple straight-away, to manipulate the doors, they were given training series in which they were forced to take a particular one of the three routes at each trial. The attempt was made to give greater training in both the short routes with the common final path than in the long one. Records were kept which showed the degree to which the rat, after being blocked in one pathway, had a propensity for one or the other of the alternate routes. The training was eventually

arranged so that the rats were using the two short routes with the common alley much more than the long one. Finally the opening to the food box reached via the common alley was locked. The rats could now take the other short route leading to the common alley and the same locked door or the long route which alone would enable him to enter the food box. The purpose of the experiment was to discover whether or not the rat could acquire "insight" into the fact of this final common path so that, if this final path should be "made bad" by locking of the common opening to the food box the rat, having reached it by one of the short routes, would not then attempt to go to the food by the other short path (although he had previously built up a very strong propensity for this path). When the opening to the food box was thus locked the long route was taken so much more than the other short route that the author feels that the rats had insight into the situation of the final common path. The results show that this selection of the long path was not habitual, but due to the fact that the rat had insight into the significance of the final commonness of the two short alleys. Before the food box was locked the rat, if blocked from reaching it via one short route, usually chose the other short one. When the door was locked the results showed a decidedly predominant tendency to choose the long route. The author feels, therefore, that the results can only be explained on the basis of insight. He regards his results as preliminary only and outlines a program of future research.—*N. L. Munn* (Pittsburgh).

556. Hunter, W. S. The sensory control of the maze habit in the white rat. *J. Genet. Psychol.*, 1929, 36, 505-537.—A series of experiments was run to test the explanation of the maze habit as a chain-reflex and as proprioceptively controlled. Guidance by exteroceptive stimuli was controlled by blinding, by controlling the direction of a constant slight noise, by eliminating air currents and temperature changes, by careful machining of paths, and by frequent washing and sandpapering of the latter. Different forms of double alternation maze were used—two bidimensional spatial, two tridimensional, one temporal—all turns being at right angles and the distances between all successive turns being exactly equal, so that all proprioceptive stimuli resulting from right turns should be alike and all those from left turns alike. Each of the bidimensional and tridimensional mazes was mastered by some animals, and on the temporal maze some successful runs were made, tending to prove that the habits established were not exclusively proprioceptive, nor of the pure chain-reflex type. A satisfactory explanation must postulate some neural supplementary process, either as a total behavior pattern or as a cumulative trace of responses previously made during the same trial; and this may be a form of what has been called a symbolic process.—*J. F. Dashiell* (North Carolina).

557. Lake, M. S. A study of the iris mechanism of the alligator. *Anat. Rec.*, 1929, 44, 57-77.—A striated constrictor muscle is present in the irises of

the alligator, turtle, and pigeon. Applications of atropine and pilocarpine to the eye of the alligator produce the reactions usually obtained with the smooth constrictor muscle of mammals. This was less marked in the turtle and absent in the pigeon. The nerve supply to this striated constrictor muscle is different in birds and reptiles. Present evidence indicates the absence of a dilator muscle—dilation occurring through elastic iris tissue. Local application and injection of nicotine produced active constriction in the turtle and alligator but not in the pigeon. After application of this drug to the ciliary ganglion in the turtle and the alligator, stimulation of the third nerve no longer produced constriction of the iris. Stimulation of the ciliary nerves constricted the pupil. Local applications of curara produced dilation in the iris of the pigeon but not in the turtle or alligator. Through application of curara to the eye-muscle nerves of the alligator and turtle, it was found that the nerve endings are not affected by curara in doses which paralyze the nerve endings of ordinary striated muscle.—*H. R. Laslett* (Oregon State).

558. Johnson, G. E. Hibernation of the thirteen-lined ground squirrel, *Citellus tridecemlineatus* (Mitchell). III. The rise in respiration, heart beat and temperature in waking from hibernation. *Biol. Bull.*, 1929, 57, 107-129.—These factors increase slowly when the animal wakes in a cold room at 8° C. and rapidly in a room at 30° C. The anterior part of the animals wakes before the posterior part.—*O. W. Richards* (Clark).

559. Kuo, Z. Y. Purposive behavior and prepotent stimulus. *Psychol. Rev.*, 1929, 36, 547.—The simple idea of reinforcement of stimulus is sufficient to take care of animal behavior. The author publicly withdraws the word "prepotency" from the vocabulary of the science of behavior in view of its possible dangers.—*H. Helson* (Bryn Mawr).

560. Lutz, F. E. Observations on leaf-cutting ants. *Amer. Museum Novitates*, 1929, No. 388.—Observations of the behavior of *Atta cephalotes polita*. "There seems little doubt that light is a controlling factor, but it may act in conjunction with a physiological rhythm and, of course, we have as yet no measure of the amount of light which is necessary to start things going." The maximum load carried by an ant seemed to be approximately 10 times the weight of the carrier. "The data show at a glance that, in general, the greater the ratio of the weight of burden to the size of the carrying ant as measured by its weight the less the speed." The difficulty of balancing a large leaf also has an influence, but this could not be measured. The influence of the amount of inclination of the pathway over which the ants travelled on their speed is also discussed. There are some interesting observations on apparent communication between groups of ants.—*N. L. Munn* (Pittsburgh).

561. Maier, N. R. F. Delayed reaction and memory in rats. *J. Genet. Psychol.*, 1929, 36, 539-550.—In a room that had been well explored previously, rats were allowed to climb from the base of a ringstand up to an elevated pathway and over to a food

supply, three times in succession; and then, after a removal from the situation for varying time intervals, were released from another point in the room. A high frequency of successful choices of the proper ringstand from others with which they had also had earlier acquaintance was taken to indicate capacity for delayed reaction. Differences of results in the delayed reaction experiments conducted by others are interpreted not in terms of presence or absence of higher processes but of the associative values of the stimuli employed.—*J. F. Dashiell* (North Carolina).

562. Piéron, H. Le problème de la sensibilité thermique chez les invertébrés marins. (The problem of thermal sensitivity in marine invertebrates.) *Ann. de physiol.*, 1929, 5, 526-528.—Reactions to heat can be obtained in marine invertebrates by burning only when the nociceptive system is involved. This is brought about without adaptation for a certain level of temperature in the tissues, the thermokinetic action having been eliminated. It doubtless results from the fact that in the natural conditions of marine environment no oriented reactions or reactions of alarm caused by thermal stimulation are aroused in the invertebrates. Therefore, efficacy of thermal stimulation requires the production of a conditioned reflex.—*Math. H. Piéron* (Sorbonne).

563. Poltyrev, S. S., & Zeligson, G. P. Der Hund ohne Grosshirn. (The decerebrate dog.) *Amer. J. Physiol.*, 1929, 90, 475-476.—A description of the behavior of dogs in which both cerebral hemispheres are removed, but in which both corpora striata and a thin layer of tissue about them remains. The animal makes very poor and inadequate motor adjustments, and conditioned reflexes to visual, olfactory and tactual stimuli fail to operate. The animal responds to sound by pointing the ears and moving the head. Conditioned reflexes were established by the use of the metronome.—*M. J. Zigler* (Wellesley).

564. Rhine, J. B., & Rhine, L. E. An investigation of a "mind reading" horse. *J. Abn. & Soc. Psychol.*, 1929, 23, 449-466.—By the use of screens so that the horse and its owner could not see each other, and by the prevention of voice directions, the conscious signal and unconscious guidance theories were disposed of. This left only the telepathic explanation, the transference of mental influence by an unknown process. Nothing was discovered that failed to accord with it, and no other hypothesis proposed seems tenable in view of the results. The experimenters, however, are still devoted to the end of more and better evidence and are interested, at this stage, in obtaining, not so much credence, as assistance in securing more evidence.—*C. H. Johnson* (Boston Psychopathic Hospital).

565. Uffland, I. M. Die Reflexerregbarkeit des Frosches während des Umklammerungsreflexes. (Reflex excitability of the frog during the embrace reflex.) *Pflüg. Arch. f. d. ges. Physiol.*, 1929, 221, 605-622.—The author indicates the following conclusions: (1) During the breeding period of *Rana temporaria* the reflex excitability to various stimulus agents (electrical, chemical and mechanical) is decreased in both male and female specimens. Inter-

ruption of the sex embrace causes a lowering of the threshold to electrical stimulation and a diminution in latent time to chemical stimulation. (2) Reflex excitability is the greatest consequent upon a natural termination of the sex reflex and spawning. An increase in reflex excitability in the case of the male is also observed if a balloon is substituted for the female; likewise when the balloon is taken away. At the beginning of the sex embrace, reflex excitability again decreases in both the male and female. (3) The stronger the sex embrace, the lower is the reflex excitability. (The strength of the embrace was measured by substituting for the female a rubber balloon connected with a manometer.)—*J. A. Gengerelli* (California at Los Angeles).

566. Yerkes, R. M., & Yerkes, A. W. *The great apes*. New Haven: Yale University Press, 1929. Pp. xix + 652. \$10.00.—The authors have presented an exhaustive compilation of the literature concerning the gibbons, the orang-utans, the chimpanzees, and the gorilla. Separate parts of the volume are devoted to each of these forms. The material covered concerns body structure as well as habits, social life, care and diseases of the animals, and experimental studies of behavior. The work concludes with a tabular résumé and a general discussion of anthropoid research. A complete bibliography through 1927 and a detailed subject and author index conclude the volume.—*W. S. Hunter* (Clark).

[See also abstracts 481, 495, 505, 524, 717.]

EVOLUTION AND HEREDITY

567. [Anon.] *Medico-legal society*. *Lancet*, 1929, 216, 924-925.—A summary of a paper and discussion on the medical, legal and sociological implications of sterilization of the unfit.—*W. T. Heron* (Minnesota).

568. Dayton, N. A. *Order of birth and size of family*. *J. Med. Asso. Georgia*, 1929, 16, 46-47.—*R. R. Willoughby* (Clark).

569. Freeman, F. S. *Intelligence tests and the nature-nurture controversy*. *School & Soc.*, 1929, 30, 830-836.—The author takes the stand that intelligence is a product of two groups of forces—genetic and environmental. Hence, with the assumption that the intelligence test measures a static quantity or that intelligence is unimprovable he would take issue, asserting, instead, that, since each individual is unique, his potentialities can be determined principally by trial. "The earlier the trial is made in the life of the individual and the more nearly adequate the conditions the less may be the limitations imposed by nature."—*H. L. Koch* (Texas).

570. Jones, H. E. *Homogamy in intellectual abilities*. *Amer. J. Sociol.*, 1929, 35, 369-382.—Homogamy (husband-wife similarity in a specific trait) requires consideration in connection with psychological theories of types, in the study of the origin and maintenance of social classes, in the statistical analysis of heredity, in psychoanalytic and other studies of social relationships in the home, in the investigation of marital infection in tuberculosis and other diseases, and in evolutionary and eugenical theory. A review of prior research shows a tendency to a

slight marital resemblance in physical traits, with husband-wife correlations for stature, eye-color, etc., averaging about .25. Early studies of resemblance in mental traits give, for the most part, similar coefficients, but these are probably attenuated to a marked degree by the unreliability of the rating methods used. A series of recent surveys, making use of more adequate mental test methods, place the marital coefficient in intelligence at approximately .5. Similar values are found in widely different social samplings. This is approximately the same degree of intellectual resemblances as that found for parents and children, and for brothers and sisters, in comparable groups. While the resemblance of blood relatives is due chiefly to heredity, the factors tending to produce husband-wife resemblance may be classified under the headings of social status selection, educational selection, racial selection, courtship selection, and selection on the basis of the duplication of parental traits.—*H. E. Jones* (California).

571. Oetli, A. [Infantile mortality, birth frequency, and race fitness in Bavaria.] *Monatssch. f. Kinderh.*, 1929 (May).—*R. R. Willoughby* (Clark).

572. Visser, S. S. *Geography of American notables: a statistical study of birthplaces, training, distribution: an effort to evaluate various environmental factors*. *Indiana Univ. Stud.*, 1928, 15, No. 79. Pp. 138.—This study brings together the data from other studies of American notables (Cattell's, Brimhall's, Nearing's, Clark's, Sorokin's, etc.), and contributes data concerning individuals sketched in *Who's Who in America*. Information concerning birthplaces, present distribution, and college training of all these individuals is analyzed with a view to evaluating possible geographical influences upon the production of American notables, and the comparative contributions of various racial stocks. More detailed analysis is made in the cases of individuals born in Indiana and surrounding states. Many charts and tables are presented. The author concludes that regions which yield leaders in one field tend to yield leaders in other fields, and that these regions lead in other respects. The New England states (especially Massachusetts) have contributed the most, and the Southern states the fewest notables in proportion to population. Climate, topography, soil, natural resources, etc., do not seem to affect the yield of notables. The characteristics of the population, and especially their ideals, seem much more potent than any other factors in the yield of notables in any state or region. Recommendations are made as to means of increasing the number of American leaders.—*D. W. Jensen* (Michigan Central State Teachers College).

573. Woolston, H. *Raymond Pearl: the biology of population growth*. *Amer. J. Sociol.*, 1929, 35, 403-410.—Raymond Pearl's conclusions on the rate of population growth include the following: (1) populations grow according to the same mathematical laws that individuals follow in the growth of their bodies; (2) human populations grow according to the same law as do experimental populations of

lower animals; (3) rate of fertility is negatively correlated with density of population; (4) birth-rate is negatively correlated with wealth; (5) the indirect psychological effects of relative poverty express themselves in the sexual activity of human beings and thus affect the birth-rate. Against these it should be pointed out that not all populations either increase or remain stationary; nor, when they grow, do they always follow the curve. The number of persons per acre is hardly acceptable as the measure of the density of cities. Some of Pearl's conclusions need examination by psychologists and economists.—(Courtesy *Amer. J. Sociol.*)

[See also abstracts 461, 687, 688.]

SPECIAL MENTAL CONDITIONS

574. Adler, A. *Übertreibung der eigenen Wichtigkeit.* (The overemphasis by a subject of his own importance.) *Int. Zsch. f. Individual-psychol.*, 1929, 4, 245-251.—Through discussion of a case Adler illustrates his method in analyzing problems in personality development. A girl of 11 creates a scene every morning by crying and screaming over the preparation for school. She is a good student and in many respects a dependable and likable child. Adler then deduces indirectly from the report that too much emphasis has been laid by the parents on her personal appearance, her food, and her social standing. The child has thus developed a very conceited opinion of her own importance and at the same time a fear of inadequacy. All her actions are calculated to keep herself and her affairs in the center of attention for the family. Means are discussed for leading her into a more reasonable attitude toward life.—O. N. de Weerd (Beloit).

575. Allendy, R. *Classification des caractères.* (Character classifications.) *Hygiène ment.*, 1929, 24, 84-88.—In studying character, the investigator must clear away all acquired material in order to consider only the very foundations of personality as revealed by psychoanalysis.—Math. H. Piéron (Sorbonne).

576. Alexander, F. *The need for punishment and the death-instinct.* *Int. J. Psychoanal.*, 1929, 10, 256-269.—A discussion of the masochistic expression of the death instinct.—D. Shakow (Worcester State Hospital).

577. [Anon.] *An investigation of psycho-analysis.* *Lancet*, 1929, 217, 31-32.—This is a discussion of the report of the committee appointed by the British Medical Association to "investigate the subject of psycho-analysis." The report is inconclusive concerning the value of psycho-analysis, but the committee clearly recognizes the Freudian school as the school of psycho-analysis. The evaluation of psycho-analysis must be based upon the record of this school and not upon the record of its rivals and imitators.—W. T. Heron (Minnesota).

578. Bassoe, P. *The psychoneuroses: what the general practitioner should know and do.* *J. Missouri State Med. Asso.*, 1929 (August).—R. R. Willoughby (Clark).

579. Baumgarten, —. *L'état actuel de l'étude du caractère dans les examens de sélection psychotech-*

nique. (The present status of the study of character in psychotechnical selection tests.) *Rev. de la sci. du travail*, 1929, 1, 256-265.—A general review of studies on character.—Math. H. Piéron (Sorbonne).

580. Bledsoe, E. P. *The psychology of the tuberculous patient.* *Clin. Med. & Surgery*, 1929, 36, 379-382.—R. R. Willoughby (Clark).

581. Brill, A. A. *Unconscious insight: some of its manifestations.* *Int. J. Psychoanal.*, 1929, 10, 145-161.—A series of cases are reported in which certain phenomena lead the author to postulate unconscious insight on the part of the patients discussed.—D. Shakow (Worcester State Hospital).

582. Chadwick M. *Notes upon the fear of death.* *Int. J. Psychoanal.*, 1929, 10, 321-334.—A study of the various psychological manifestations of the fear of death, due to anxiety without real cause, show so many points in common that they suggest to the author "fundamental origin in one of the earliest stages of human development." Its roots lie in the child's fear of separation from its mother and the feeling of helplessness resulting. In its more superficial form it is connected with conscious guilt, by way of religious and educational teachings.—D. Shakow (Worcester State Hospital).

583. Clark, L. P. *The psychoanalytic institute and the problem of lay analysis.* *J. Nerv. & Ment. Dis.*, 1929, 70, 141-154.—A consideration of some of the problems concerning the present and future selection, training and standing of the lay analysts in America and abroad.—R. A. Young (Boston Psychopathic Hospital).

584. Connell, E. H. *An analysis of psycho-sexual divalence in women.* *Brit. J. Med. Psychol.*, 1929, 9, 243-257.—The paper deals extensively with the female inferiority complex as seen in the history of the race. It is concluded that the idea of womanhood as an inferiority arises in cultures where the economic advantage is with the male. Causes and consequences are shown by illustrative cases.—M. B. Jensen (Michigan Central State Teachers College).

585. Decroly, O. *La caractérolgie et l'orientation professionnelle.* (Characterology and professional orientation.) *Hygiène ment.* [Supp. *Encéph.*], 1929, 24, 65-78.—A consideration of character is as important in professional orientation as is the question of physical, motor, or intellectual aptitudes. According to the age and nature of the subjects, character is dominated sometimes by biological and physiological factors, sometimes by factors of a mental order (affectivity, intelligence, activity, and will). The author distinguishes in the affective domain two poles, the one turned inward (egocentrism), the other turned outward (altruism). Besides these two general tendencies there are specific tendencies which may be passively predominant (recoil and capitulation) or actively predominant (attack and domination). There results from this mixture an orientation of mental activity which gives its peculiar stamp to character. The author believes, first, that character is composed essentially and genetically of factors belonging to physical and nervous states; second, that the order of the appearance of these factors implies a persistence of factors already ap-

parent in infancy; third, that certain factors arrive slowly which may give character an orientation concealing or weakening certain primary factors, particularly those of an affective nature; and, fourth, that among the primary factors capable of serving as the basis of character, there can be distinguished vigor, activity, quickness, the egocentric tendency, and concrete intelligence, while among the secondary factors, appearing later, are found the altruistic tendency, sexual and maternal instincts, and abstract intelligence influenced by experience and school training.—*Math. H. Piéron* (Sorbonne).

586. Eder, M. D. On the economics and future of the super-ego. *Int. J. Psychoanal.*, 1929, 10, 249-255.—The author discusses the positive and negative values of the super-ego from the economic side. The severity, inflexibility and non-adaptability of the super-ego are compensated for to a certain extent by the chance it gives to the slow ego to develop while it (the super-ego) battles with the id. Whereas the id has probably not undergone any change within historical times, the ego and the super-ego have changed considerably. It is possible that in the future the super-ego functions will be relinquished in favor of control by the ego.—*D. Shakow* (Worcester State Hospital).

587. Ehmke, P. Der Exhibitionismus in ärztlicher und gerichtlich-ärztlicher Betrachtung. (Exhibitionism from the standpoint of medical jurisprudence.) *Allg. ärzt. Zsch. f. Psychotherap. u. psych. Hygiene*, 1929, 2, 680-696.—Among naked savages exhibitionism as a mode of satisfying sexual impulses cannot occur. Certain phases of it are inevitable among children and lovers; as with other deviations, we may see in exhibitionism an individual kinetic form of a normal potential energy common to all. Male exhibitionists are more numerous than female, partly because fashion permits greater freedom to the female, and partly because the male organ is better adapted for display. Consequently, the disorder among females often takes the form of an urge to gaze rather than an impulse to reveal. Six case studies are reported. In all instances the initiating trauma occurred in childhood with parents and relatives often the responsible agents. The desire to repeat a pleasurable experience leads to fixation on this infantile level, with the entire sexuality restricted to an overvaluation of the visual effects of the genital zones. The clause in the legal code covering offenses is a reflection of the older view of Krafft-Ebing that exhibitionism is a malady conditioned by organic brain defects. Contemporary psychotherapy is in a position to demand a revision of the methods of punishment.—*G. W. Hartmann* (Pennsylvania State).

588. Ellis, H. Man and woman. Boston: Houghton Mifflin, 1929. Pp. vi + 495. \$5.00.—This is a revised and popularized edition of a book first published in 1894. In this edition much of the statistical data and detail has been omitted. The material itself has been brought up to date. Pertaining to be a study of the secondary sex characteristics it contains the following chapter headings: metabolism, the viscera, the periodicity of women, the growth

and proportions of the body, the pelvis, the head, the senses, motion, the unconscious, the affectibility of women, the artistic impulse, the intellectual impulse, and the variational tendency.—*N. L. Munn* (Pittsburgh).

589. Federn, P. An every-day compulsion. *Int. J. Psychoanal.*, 1929, 10, 130-138.—An analysis of the "street-pavement" obsession. Patients' answers to the "why" of the more or less elaborate ceremonial of treading on pavement blocks are neurotic rationalizations—usually only evasions. From an analytic standpoint, the primary significance lies in the symbolic representation of the vagina by each fissure. "The content of the obsession therefore may be this: one must not touch the female symbol with the foot, which is so commonly a male symbol. But, equally well, to tread on the join may be the obsessional reaction against the taboo of the fissure." Its secondary significance lies in its connection with "onanism" with respect to "not touching." A case of "street-pavement" obsession is discussed.—*D. Shakow* (Worcester State Hospital).

590. Ferencsi, S. The unwelcome child and his death-instinct. *Int. J. Psychoanal.*, 1929, 10, 125-129.—Unwelcome children become aware consciously or unconsciously of the aversion or impatience of parents and lose their desire to live. They either die easily and willingly or have a streak of pessimism and aversion to life. Males of this type suffer from disturbances of potency and females may show frigidity. A certain elasticity of analytic technique must be allowed in the treatment of these cases because of the difficulty and inadvisability of insisting on active efforts on their part before they have developed certain "positive life-impulses."—*D. Shakow* (Worcester State Hospital).

591. Flügel, J. C. Clothes symbolism and clothes ambivalence. *Int. J. Psychoanal.*, 1929, 10, 205-217.—A discussion of the symbolism of various articles of human clothing. The phallus is the object most frequently symbolized by clothes, the vagina and uterus are the next most common. These three classes of symbols "form between them the unconscious foundations of the conscious motives of modesty, protection and display . . . the three primary functions of dress." These satisfactions are not achieved without conflict, which is of two kinds: first, "between the various kinds of clothes satisfactions themselves," e.g., between display (probably phallic) and modesty (probably uterine); second, between all or any of the motives mentioned and certain other motives which oppose themselves to the wearing of clothes, i.e., narcissistic (exhibitionistic) and auto-erotic motives. These conflicts result in a highly ambivalent attitude towards dress.—*D. Shakow* (Worcester State Hospital).

592. Ford, C. A. Homosexual practices of institutionalized females. *J. Abn. & Soc. Psychol.*, 1929, 23, 442-448.—To institutionalize individuals solves the problem of society temporarily, but does not mean that once the individual is institutionalized he offers no problem. Even slight acquaintance with institutions shows a multiplicity of difficulties, one of the most universal of which is innate homosex-

uality. Data for this article were gathered: (1) by observation of the inmates; (2) by contact and interviews with the inmates, before, during, or after their term; and (3) by interviews with the officers in charge of the institution. Finding no heterosexual outlet for their sexual desires, it is most natural that the inmates should turn their attention to possible homosexual experiences. That the girls studied are not truly inverted is evidenced by the lack of fidelity, the ease with which the friendship is broken by close contact, and the fact that they do not persist in homosexuality after release from the institution. A suggestion for reform is the use of sublimation by positive measures rather than repression by negative ones.—*C. H. Johnson* (Boston Psychopathic Hospital).

593. Glover, E. Psycho-analytical groundwork in group psychology. *Int. J. Psychoanal.*, 1929, 10, 162-169.—The author holds that certain group-formations of childhood in western European villages offer a fruitful field for anthropological and psycho-analytical investigation. He discusses certain aspects of the activities of homogenous "pubertal" groups which are formed spontaneously, remain in existence for a number of years, and have fairly advanced ethical codes. The distinguishing characteristic of these groups is the "integrity and community of libidinal aim." The rules governing exhibitionism and viewing are singled out for detailed discussion. The author also points out the relationship between the findings in this group and certain hypotheses accepted by analytical group psychologists.—*D. Shakow* (Worcester State Hospital).

594. Gordon, A. Sexual excesses in relation to nervous and mental diseases. *Urologic & Cutaneous Rev.*, 1929 (August).—*R. R. Willoughby* (Clark).

595. Gräfenberg, E. Die Reichweite des psychogenen Faktors in der Frauenheilkunde. (The range of psychogenic factors in gynecology.) *Allg. ärst. Zsch. f. Psychotherap. u. psych. Hygiene*, 1929, 2, 665-680.—The medieval lay belief that mental disorders were caused by diseases of the genital apparatus persisted into the last century and led to attempts to cure these disorders by sexual promiscuity. Gynecologists recognize that their triad of symptoms—pain, bleeding, and discharge—may all be dependent upon psychic causes. Such signs have a special significance because of the frequency with which they simulate grave enteric conditions, thereby occasioning unnecessary operations. According to Walthard's investigations, vaginism is always of psychogenic origin. It is an anxiety neurosis in the sense of a conditioned reflex and shows connections with dyspareunia and frigidity. Impotence in the male (an analogous condition) would probably occur as frequently if equivalent fears of pregnancy, infection, etc., had to be met. The psychic etiology of dysmenorrhoea is seen in the fact that the first pains often occur during pubertal stresses as a result of insults, preparation for examinations, etc. Vomiting during pregnancy may be due to hatred of the child. If the patient is simply narcotized and upon awakening told that her pregnancy has been terminated, the vomiting ceases, only to return the

moment the true state of affairs is appreciated. There is no psychiatric instance better illustrative of the independence of mind from body than *grossesse nerveuse*. So typical is this clinical picture that many a midwife and obstetrician has been deceived to the point of expecting delivery. Author warns against the assumption that all peritoneal disorders are psychogenic, and urges a sharp division of labor between the gynecologist and the psychotherapist.—*G. W. Hartmann* (Pennsylvania State).

596. H., M. Die Ethnologie zu Freuds Psychoanalyse. (The ethnology of Freud's psychoanalysis.) *Kath. Kirchenzeit.*, 1929, 69, 351-352.—Concerning W. Schmidt's book.—*A. Römer* (Leipzig).

597. Hawk, P. B. A study of the physiological and psychological reactions of the human organism to coffee drinking. *Amer. J. Physiol.*, 1929, 90, 380-381.—After making control tests, coffee was given one to three times daily to 100 subjects, selected from a group of 500 available candidates. The conclusion is reached that two to six cups of coffee daily produces no outstanding and prolonged harmful effect on the heart, kidneys or gastro-intestinal tract. The nervous system, however, is deleteriously affected, as is indicated in a reduction in the period of sleep, an increase in the number of bad dreams, a reduced ability to concentrate, an increase in nervousness, headache and dizziness, a delay in simple reaction time, and a decrease in accuracy in rapid calculation. These results apply with greater force to young men unaccustomed to the use of coffee than to those who have for years been accustomed to its moderate use.—*M. J. Zigler* (Wellesley).

598. Hernandez, E. A. On the necessity for having special laboratories for the experimental study of somatic death. *Amer. J. Physiol.*, 1929, 90, 383-385.—Suggestions are made regarding the importance of developing laboratories for the study of the conditions and attending symptoms of death, and as to the desirability that physiologists develop centers of experimental thanatology in order that in time the delay and perhaps survival of senility may be achieved.—*M. J. Zigler* (Wellesley).

599. Hess, W. E. The mechanism of sleep. *Amer. J. Physiol.*, 1929, 90, 386-387.—Sleep is shown to result from a state of excitation and to be controlled not by a narrowly confined sleep center in the brain, but by the general strata along the axis of the brain and adjacent to the ventricles, in which the vegetative reflex functions also are assumed to be controlled.—*M. J. Zigler* (Wellesley).

600. Hirschfeld, M., & Berndt, G. Das erotische Weltbild. (The erotic picture of the world.) Helleran: Avalun-Verlag, 1929. Pp. 208. Rm. 9.—*R. R. Willoughby* (Clark).

601. Hollander, B. Character and character training. *Ethol. J.*, 1929, 14, 49-58.—Character is, according to Hollander, "the peculiar combination of the innate mental dispositions which supply the motives for conduct, and distinguish one person from another, and make for consistency in behavior." Much of the emphasis throughout the article is upon "inherited internal forces." Character training includes, as here discussed, habit formation, self-

knowledge, motives, self-confidence, and education. Some challenging statements occur, viz: "In some characters the moral element is lacking." "All our dispositions serve useful purposes." "Temptation is the voice of the suppressed evil when good is dominant; conscience is the voice of the suppressed good when evil is dominant." A table of questions designed to appraise intellectual, emotional, and instinctive "dispositions" is appended.—*F. M. Teagarden* (Pittsburgh).

602. Horton, L. H. On college disappearances: the analysis of a case. *New England J. Med.*, 1929, 201, 1155-1163.—The events in the life of Frances St. John Smith which led to her disappearance from college in Northampton are put together by Horton with the aid of his method of retrospective prophecy. These events, plus her physiological and psychological maladjustment, led her to leave for her home. On the way, while crossing the trolley bridge, she fell off into the water. This hypothesis was verified six months after the paper was read before the Massachusetts Medico-Legal Society, when her body was found in the river.—*O. W. Richards* (Clark).

603. Isaacs, S. Privation and guilt. *Int. J. Psychoanal.*, 1929, 10, 335-347.—An attempt at resolving the conflict between earlier formulas of the origin of the super-ego and certain "facts of mental history discovered directly by Melanie Klein's technique." This is done by means of some theories of Ernest Jones on guilt and super-ego as built up for the purpose of protecting the child from the stress of privation.—*D. Shakow* (Worcester State Hospital).

604. Jacoby, H. Die Nervosität des Alltags. (Nervousness in daily life.) *Int. Zsch. f. Individualpsychol.*, 1929, 4, 269-275.—Both conscious and unconscious human reactions are purposive or directed toward a goal. The drive in the various expressions of nervousness such as temper, quarrelsomeness, and boastfulness is found in the striving for social superiority. The nervous individual is uncertain of his status and uses the plea of being "nervous" to rationalize his failures to achieve and his unsocialized behavior. The expressions of "nervousness" tend to undermine the subject still more. A fundamental difficulty is seen in that the present age over-stresses individual rights, possessions and achievements. This leads the individual to relinquish the innate drive for social security which is fundamental to self-preservation in favor of the uncertain striving for power. Coupled with this is the fact that this striving is often directed toward unrealities. The cure for the present ills of nervousness must be found in a change from individual possession and competition to communal possession and cooperation.—*O. N. de Weerd* (Beloit).

605. Kallmann, F. Zur Psychopathologie des abergläubischen Verbrechers. (Psychopathology of the superstitious criminal.) *Monatschr. f. Psychiat. u. Neur.*, 1929, 72, 37-59.—Crimes from superstitious motives have an intimate relation to the true delusions. The superstition hampers the logical reflections of the uneducated offender and hence may be considered as one of the factors leading to the crime.—*G. W. Hartmann* (Pennsylvania State).

606. Kellogg, E. R. Duration of the effects of post-hypnotic suggestion. *J. Exper. Psychol.*, 1929, 12, 502-514.—A pioneer study to measure the length of time the effect of post-hypnotic suggestion lasts, and to describe the curve of its decrease with time and the factors influencing its permanence. The suggestion employed involved a specific variation in the rate of respiration. The subject was instructed that while reading even-numbered pages of a given book, he would breathe at twice the regular rate, and on the odd-numbered pages he would breathe half as fast as usual. These instructions were given to one group of subjects in the trance, and to a control group as simple waking instructions. The 13 Ss were all students, and the readings were from a book of poems containing material frankly boring to the Ss. Respiration records were taken kymographically, and the Ss were then tested over periods of time varying from 15 minutes to 90 days after the initial sitting. 6 of the 8 trance Ss remained in complete ignorance throughout the experiment of any change of breathing, nor did they guess that a post-hypnotic suggestion was being tested. The results are computed in the form of ratios of the observed respiratory rates to those indicated in the instructions. Normals showed no loss in the power of the suggestion with time, whereas the opposite was true of the trance subjects. During the first three weeks the trance Ss in general decreased rapidly, while the normals had a tendency to rise at first, attaining at 15 days after the suggestion a mean of 150% of the original ratio. "The power of post-hypnotic suggestion steadily decreases during the first three weeks after it is given. Obedience to waking instructions shows no loss except in accuracy of performance. After the first sharp fall the trance Ss seem to have reached a level where the effect of practice and the decrease in the potency of the suggestion neutralize each other, and on this low level obedience to the suggestion may continue indefinitely."—*S. Renshaw* (Ohio State).

607. Klein, M. Personification in the play of children. *Int. J. Psychoanal.*, 1929, 10, 193-204.—The author offers here a more detailed discussion of the mechanism of personification in children's play already discussed in an earlier paper (see I: 1341). She illustrates by means of examples from different types of disease the relation between the personification and the element of wish-fulfilment. The severest anxiety results from a super-ego which is introjected at a very early stage of ego-development, and the "supremacy of this super-ego is a fundamental factor in the genesis of psychosis." By the use of the play technique it is possible to analyze the early phases of super-ego formation in young children, diminish the anxiety, open the way for more kindly imagos, and therefore offer a fair prospect of cure.—*D. Shakow* (Worcester State Hospital).

608. Klemperer, E., & Weissmann, M. Beitrag zur somatischen Reaktionsweise Hypnotisierter. (The somatic reaction-mechanism in the hypnotized.) *Monatschr. f. Psychiat. u. Neur.*, 1929, 71, 356-365.—Determinations by the Van Slyke method of the O₂ and CO₂ content of the blood of four psychopaths and one hysteric during hypnosis. Shortly

after sleep was induced, the expectation effect resulted in a pronounced acceleration of circulation. The suggestions had no effect over and above the spontaneous oscillations.—*G. W. Hartmann* (Pennsylvania State).

609. Knopf, O. *Individualpsychologie und Gynäkologie*. (Individual psychology and gynecology.) *Int. Zsch. f. Individual-psychol.*, 1929, 4, 276-286.—This article discusses cases showing that many disturbances of the sexual functions of women are functional and not physiological. Excess and too scanty flow of menses, absence, delay and too frequent appearance of periods, and abnormal uterine reflexes are among the disturbances found. Bibliography of 21 references.—*O. N. de Weerd* (Beloit).

610. Kotsovsky, D. *The origin of senility*. *Amer. J. Physiol.*, 1929, 90, 419-420.—The onset of senility may be delayed by reinforcing all tissues and organs, particularly those which, like the central nervous system, have the most finely differentiated structure. These tissues have the most unfavorable conditions of nourishment, are first affected by inadequate sleep, stop growing first, and are least disposed to regenerate. Accordingly, the first evidences of senility appear in these tissues.—*M. J. Zigler* (Wellesley).

611. Kronfeld, A. *Zur Theorie der Individualpsychologie*. (Concerning the theory of individual psychology.) *Int. Zsch. f. Individual-psychol.*, 1929, 4, 252-263.—The individual-psychologist does not, as his critics often assert, impose his own standards upon the subject; rather, these are presented by the given conditions. Further, where insight and a rational attitude toward life are stressed this does not lead to the development of a spiritless and uninspiring humanity; neither does it make the psychologist morbidly interested in uncovering the hidden recesses of a soul. Individual-psychology's frank interest in the practical adjustments in active life is its best safeguard against vagaries. Most cases are developed on the basis of a fictitious, self-assumed inferiority and therefore lend themselves to corrective treatment. Only in cases where an immediate physical correlate for the inferiority is found does Adler speak of an "organic substratum for neuroses." Structurally and genetically the sense of inferiority is functionally present before a clear consciousness of self is developed. The latter is necessarily a development growing out of an experience of relationships in the order of we, you, and I. Furthermore, the evaluation of these concepts and their relationships grows out of opposition which the individual experiences, thus placing the feeling of inferiority as prior. This is emphasized as contrasting with the logical conception which would presuppose a positive conscious evaluation of the self as prior to a sense of inferiority. This development is biologically based on various vital tendencies, as the tendency to self-preservation and the organic instinctive drive to development and power. Two other topics, more metaphysical in their treatment, are taken up in the article: the feeling of social relationships (*Gemeinschaftsgefühl*) and a theory of personality. The article is a re-

sponse to a personal as well as critical attack upon Kronfeld by one Hans Kunz, who is characterized as a young and exceptional psychological investigator.—*O. N. de Weerd* (Beloit).

612. Kronfeld, A. *Die gesicherten Tatbestände in der Parapsychologie*. (The assured facts in parapsychologie.) *Zsch. f. Parapsychol.*, 1929, 4, 526-540.—The author deals primarily with the problem of what constitutes a genuine fact in psychical research. He denies that the conception of a fact is determined by its observability. He declares that a wide gulf exists between the thorough demands of exact objectivity and the practical fulfillment of this requirement. Experimental conditions are not entirely controllable, and observation is so saturated with theoretical meanings that from a positive viewpoint the result has only a limited value. The parapsychic effect, of course, is limited to the mediums. But thereby it becomes a psychological state of affairs. If that be the case then its correspondence with the facts of natural science is irrelevant. On the other hand, parapsychic conditions are integral components of mental life as such. Kronfeld asserts that occultism is neither theoretically nor actually irreconcilable with the assured facts of science. He acknowledges, however, a special peculiarity of parapsychic phenomena, viz., that they originate in the capacities of an ego which remains ignorant of them. The ego is their prey and plaything. Kronfeld mentions a series of facts which he considers as established without a shadow of doubt. He names telepathy first and psychometry next, but he questions the field of cryptoscopy. He is sceptical about parapsychical phenomena.—*O. Seeling* (Berlin).

613. Lévy-Valensi, J., & Seguinot, S. *L'affaire De la Roncière*. (The De la Roncière case.) *Hygiène ment.* [Suppl. *Encéph.*], 1929, 24, 150-156.—Study of a case of mythomania in a young girl of 16 whose false allegations of rape had condemned a lieutenant of lanciers, Emile de la Roncière, to 10 years imprisonment. The authors diagnosed the case as mythomania, involving both vanity and perversity; vanity because of her melodramatic recital of the alleged attempt at rape, and perversity because of her calumnious denunciations having injury as the only end in view.—*Math. H. Piéron* (Sorbonne).

614. Lewin, L. *Banisteria Caapi, ein neues Rauschgift und Heilmittel*. (*Banisteria caapi*, a new remedy and narcotic.) Berlin: Stilke, 1929. Pp. 18. M. 1.50.—The alkaloid banisterin, derived from the stem and twigs of *Banisteria*, was studied for its effects on cold- and warm-blooded animals. Motor and sensory excitement appears with the latter. Experiments on sick and healthy subjects demonstrated the specific effect of the substance upon the extrapyramidal apparatus. Beneficial influences in cases of genuine and postencephalitic Parkinsonisms are reported. Its frequent identification with harmin is rejected.—*G. W. Hartmann* (Pennsylvania State).

615. Linsert, R. *Unzucht zwischen Männer?* (Male prostitution?) Berlin: Neuer Deutscher Verlag, 1929. Pp. 133. M. 3.50.—This brochure is an

attempt to reform the criminal code. The author is strongly opposed to the intended jail sentence which may run up to ten years. Questionnaire data from 100 male prostitutes are reported. Analysis of the life histories indicates that unemployment and poor childhood training are major causes. Approximately 15,000 young men in Berlin are of this type. A number of other authorities contribute their views on the punishable character of male prostitution, most of them taking the stand that prophylaxis is best achieved by the elimination of poor social and economic conditions.—G. W. Hartmann (Pennsylvania State).

616. Low, B. A note on the influence of psychoanalysis upon English education during the last eighteen years. *Int. J. Psychoanal.*, 1929, 10, 314-320.—The author divides the period from 1910 (date of a paper by Ernest Jones on *Psychoanalysis and Education*) into two parts, the first ten years and the last eight. She points out that the hostility to psychoanalysis on the part of educators was almost without exception during the earlier period. The latter period has shown a remarkable change. Whereas the theory still remains but little accepted, it colors educational ideas in the modern schools at least. Its effect on psychologists, educators, etc., is touched upon, as is the more practical aspect of the great production of books on the subject in relation to education.—D. Shakow (Worcester State Hospital).

617. Mauerhofer, H. Die Introversion, mit spezieller Berücksichtigung des Dichters H. Hesse. (Introversion with special reference to the poet H. Hesse.) Bern & Leipzig: Haupt, 1929. Pp. 61.—In the first and more theoretical part of his work the author proceeds on the psychoanalytically grounded psychology of C. G. Jung, particularly his book, *Psychological Types*. There follows an exposition of the type in which the interests, through psychological predisposition, are chronically turned in upon the ego, i.e., the introvert. The phenomenon of depersonalization and dissociation is studied in connection with Reik, where it appears as a result of introversion. It seems that the mental energies invested in the ego lead to a change in the form of the ego while they split it (the root *schiso* means splitting within the ego itself as well as splitting between the ego and the external world). The excessive mental regression upon the subject leads on the one hand to a general but especially affective impoverishment of the external world, on the other hand to a boundless raising of the ego, which hypertrophies solipsistically. The introvert always keeps his distance in the presence of reality. It is shown that there is a great similarity between the introvert and Bleuler's schizoid: both are distinguished by a decided lack of syntonia. The author sketches briefly the extreme introvert's philosophy of life and says: solipsistically strengthened mentality, in order not to deteriorate into delusion, in the ultimate metaphysical experience leaves God and the world behind in order to resign completely. He then describes in detail the functions of the unconscious which he accepts with C. G. Jung (not exclusively) in its self-compensatory

activity of adjustment. The breaking through of the unconscious (emotional explosions) which disturb the introvert are thus explained by saying that in him affectivity is clogged but has not disappeared. According to the theory of compensation the unconscious of the introvert is extroverted and thus permits the necessary expression of interests in the external world. In an excursion on *Introversion and Schizothymia* the author shows the psychologically conditioned relationship between the introvert and the Kretschmer body type of the schizothymic. The life and work of the poet Hermann Hesse serves the author as casuistic material. A psychography follows a study of the relations of introversion and work, which shows Hesse to be a very introverted man, as appears in his work as well as in his style and personal preferences. In conclusion the author considers the biological value of the introvert and comes to the conclusion with Bleuler that the introvert on account of his autochthonic attitude and his contempt for reality is predisposed to be the bearer of development. The author introduces in this work the term *idiotonia* (in-itself-determination) as the psychological opposite of Bleuler's syntonia; characteristic of the introvert is his idiotonic reaction pattern.—H. Mauerhofer (Bern).

618. Miles, W. E. Drug effects measured by acquired patterns of response. *Amer. J. Physiol.*, 1929, 90, 451.—Morphin, strychnin, caffen, cocaine, hyoscin and alcohol were injected in rats in minimal doses. Alcohol causes locomotor incoordination but no loss of orientation and memory. Hyoscin causes the rats to explore as in a novel situation; memory is impaired but coordination is normal. No drug was found to cause an improvement on responses in the normal condition.—M. J. Zigler (Wellesley).

619. Müller-Braunschweig, K. Ueber Entstehung und Bedeutung des Schuldgefühls. (Origin and significance of the feeling of guilt.) *Ethik*, 1929, 5, 472-482.—Normal sense of guilt is a reaction of the self toward the moral demands or an expression of tension between one's nature and one's obligations. Whenever this tension becomes unbearable, the religious experience serves as a solution of the conflict. Pathologically exaggerated sense of guilt is found in the case of the depressive and compulsive neuroses; the hysterical type reveals it in pathologically weak form. Treatment consists in restoring the sense of guilt to the appropriate objects.—G. W. Hartmann (Pennsylvania State).

620. Neumann, J. Über den IV allgemeine ärztlichen Kongress für Psychotherapie (im Bad Nauheim). (Report on the IV General Physicians Congress for Psychotherapy, held in Bad Nauheim, April 12 to 14.) *Int. Zsch. f. Individual-psychol.*, 1929, 4, 303-305.—Addresses were delivered by C. G. Jung for his school and Künkel for the individual-psychologists. On the second evening papers were presented by Haerberlin on the significance of symbols for religion; by Allers, formerly an individual-psychologist, who presented the view that the pastoral service of the priest in the Roman Catholic church is clearly differentiated from the work of the individual-psychological therapist. Künkel held that

when religion is used as a means for gaining personal advantage through observance of rituals and dogmas it is backward-looking and tends to develop neurotic trends. True religion is courageously forward-looking, and leads to adventure. Psychotherapy thus serves religion when it brings courage to the timid and reorganizes the haughty. Religion serves psychotherapy when it helps to develop appreciation of the fact that the purpose and value of the personal life is found beyond the individual. K. Weinmann read a paper on the organization of psychotherapeutic service for patients covered by various insurance and protective funds. Insurance companies and "sick funds" are at present unfriendly toward the movement. Weinmann believes such service not only practicable but of advantage to the insurance companies themselves.—O. N. de Weerd (Beloit).

621. Neumann, J. *Psychotherapie, Theologie, Kirche. II.* (Psychotherapy, theology and the church. II). *Zsch. f. Religionspsychol.*, 1929, 2, 141-164.—Except for a short concluding chapter on the problems of theology and the church the author here presents the main lines of relationship between psychotherapy and religion. He then extends Girgensohn's findings for feeling, taking the position of individual psychology. In his further development he reaches the conviction that feeling is in part the unconscious dynamic-teleological aspect of the ego. Feeling is, however, the category of appreciation of the psychological locus of appreciation. The important points thus derived for religion are then presented. Along with the religious system of relations there appears a social one, the system of ethics. The feeling of "depreciation" forms the point of connection for both systems. The differentiation between the feeling of inferiority and discernment of inferiority presented by Rieger is rejected by the author from Girgensohn's point of view. The author's sociological approach aids in the understanding of ethical and cultural problems and questions concerning the security of life. Thus it is important in education to understand how a child has come to have a false structure in his mental constitution; in the same way, but more generally, remedial education can clarify the causes from which the feeling of inferiority originates. Neumann sketches the progress of remedial treatment. As the ultimate value and thus as a demand on the individual and on society individual psychology sets the norm which is the antitype of nervous disease. The author reaches a universalistic rather than an individualistic concept. He finds a connection between Christianity and individual psychology in the immanent part of the aim of Christianity. In some cases he shows how even the clergyman must first seek the causes of depression. As a matter of fact pastoral care is still founded on a pre-scientific basis.—A. Römer (Leipzig).

622. Oberndorf, C. P. Submucous resection as a castration symbol. *Int. J. Psychoanal.*, 1929, 10, 228-241.—A detailed report of a case in which submucous resection was symbolic of castration.—D. Shakow (Worcester State Hospital).

623. Osnato, M. The psychology and psychopathology of the impotent. *Urologic & Cutaneous Rev.*, 1929 (August).—R. R. Willoughby (Clark).

624. Owensby, N. M. Sexual frigidity. *Urologic & Cutaneous Rev.*, 1929, 22, 629-634.—R. R. Willoughby (Clark).

625. Payne, S. The myth of the barnacle goose. *Int. J. Psychoanal.*, 1929, 10, 218-227.—The barnacle goose is a species of wild fowl visiting the British coasts in winter. Its breeding place—the Arctic region—was long unknown, and an interesting myth grew up to explain its origin. Essentially the myth formulates an unnatural theory of procreation, partially determined by the superficial resemblance between the goose and its supposed progenitor, the barnacle. The author finds very much of interest in this myth in its relations to unconscious phantasy.—D. Shakow (Worcester State Hospital).

626. Prange, Fr. Zur Pathogenie und Therapie der männlichen Impotenz mit besonderer Berücksichtigung tierexperimenteller Ergebnisse. (Concerning the pathogenesis and therapy of male impotence, with special reference to results of animal experiments.) *Münch. med. Woch.*, 1929, 32, 575-577.—R. R. Willoughby (Clark).

627. Prince, M. Why we have traits—normal and abnormal. The theory of integration of dispositions. (An introduction to the study of personality.) *J. Abn. & Soc. Psychol.*, 1929, 23, 421-433.—Personality is the sum total of all the biological innate dispositions of the individual and of all the acquired dispositions and tendencies—acquired by experience. The important corollary of this theory of dispositions is that we should not look for the springs of human behavior in a single vital principle such as the urge of the libido or an *élan vital* or other metaphysical entity, but rather to the motivating energy derived from and inherent in the different inherited dispositions and the many multi-form, integrated and organized systems of acquired dispositions created by the experiences of life. A second corollary is that personality is a synthetic product, much as coal tar derivatives or other chemical compounds are synthetic products, of which the properties are determined by the number, combinations and configurations of selected elements. A third corollary is that any personality, theoretically, can be modified or reconstructed or transformed into another synthetic product with traits corresponding to the new synthesis.—C. H. Johnson (Boston Psychopathic Hospital).

628. Reik, T. The therapy of the neuroses and religion. *Int. J. Psychoanal.*, 1929, 10, 292-302.—The author feels that "psycho-analysis must be a psychological science, or it must cease to be." Therapy of the neuroses of a real and lasting kind is impossible without a deep knowledge and understanding of the underlying factors. And a knowledge of the origin and development of religious concepts is of the greatest significance for therapy because religion grasped the significance of the sense of guilt a long time ago. It is also the greatest repressive influence on the form of cultural institutions. A knowledge of the development of religious ideas

permits of the evaluation of the "repression-resistances" and the "depth-dimension" of the neuroses.—D. Shakow (Worcester State Hospital).

629. Rickman, J. On quotations. *Int. J. Psychoanal.*, 1929, 10, 242-248.—A discussion from the analytic viewpoint of the occasions in which a quotation is used. Such subjects as virtuosity, compulsion, compilation, improvisation, parody and plagiarism in quotations are taken up.—D. Shakow (Worcester State Hospital).

630. Riviere, J. Womanliness as a masquerade. *Int. J. Psychoanal.*, 1929, 10, 303-313.—Analysis of a case of a woman, mainly heterosexual, with strong elements of masculinity. The author holds that "women who wish for masculinity may put on a mask of womanliness to avert anxiety and the retribution feared from men."—D. Shakow (Worcester State Hospital).

631. Roman, E. Encara Freud. (Regarding Freud.) *Criterion*, 1929, 5, 357-362.—The author discusses the concepts of Freud in the light of theology. He asserts that the small part of the Freudian doctrine which is acceptable is by no means original. The manifestations of conscience as a repressing force are described by the early Christian ascetics. Sublimation also is a concept the seeds of which are found in the writings of Thomas Aquinas.—J. W. Nagge (Chicago).

632. Rühle-Gerstel, A. Analyse der Psychoanalyse. (Analysis of psychoanalysis.) *Int. Zsch. f. Individual-psychol.*, 1929, 4, 264-269.—A critical review of Charles E. Maylan's recent book, *Freuds tragischer Komplex. Eine Analyse der Psychoanalyse*. Maylan undertakes to show from an analysis of Freud's writings that Freud is himself in need of the services of psychoanalysis. The reviewer questions the validity of the inferences drawn by Maylan in his analysis and also criticizes him for the crudity of the implications concerning Freud's attitudes and personality organization.—O. N. de Weerd (Beloit).

633. Sadger, J. Genital and extra-genital libido. *Int. J. Psychoanal.*, 1929, 10, 348-356.—The author divides the libido into two parts—the genital and the extra-genital. The former is that part which is mainly connected with reproduction and which in the adult is satisfied by the sex act. The latter has to do with the attainment of pleasure and sublimation. The extra-genital components can hardly be satisfied even temporarily. They are the true and important carriers of civilization, whereas the genital components have to do with the preservation of the race. The relation of these two types of libido to homosexuality, the Oedipus situation and narcissism is taken up. The author concludes with a discussion of the social and religious evaluation of the two types of libido, bringing out that psychoanalysis is interested not in following out "our own natures without restraint, but rather that we are to aim at an ennobling and higher disciplining of them." This is to be achieved not by genital asceticism, but through fostering and sublimating the extra-genital libido.—D. Shakow (Worcester State Hospital).

634. Sadler, W. B. The mind at mischief. New York: Funk & Wagnalls, 1929. Pp. xv + 400. \$4.00.—An exposition for the lay reader of the many mental disorders which are amenable to therapy, and of their bases. Sadler's position with regard to the causation of mental disorders, and to the subconscious, is based upon a combination of the theories and findings of Freud, Jung, Adler, and others, as he does not subscribe to any single theory. He discusses such topics as: the subconscious, complex formation, emotional repression, rationalization, emotional conflicts, sublimation, worries, dreads, obsessions, anxieties, psychic pain, neurasthenia, psychasthenia, transference, projection, dissociation, multiple personality, automatic writing, hypnotism, telepathy, hysteria, mind reading, dreams, paranoia, spiritualistic mediums, etc. He cites many cases, outlining his method of treatment.—M. B. Jensen (Michigan Central State Teachers College).

635. Schilder, P. Welche wirklichen Fortschritte hat die medizinische Psychologie seit Lotze gemacht? (What real progress has medical psychology made since Lotze?) *Allg. ärzt. Zsch. f. Psychotherap. u. psych. Hygiene*, 1929, 10, 601-612.—Lotze (1852) takes character from a physiological standpoint and makes individual elements the basis of his investigations. This article shows what each of the leading psychologists has contributed toward a complete change of that conception; especially Freud, A. Adler, Husserl, Adolf Meyer, Koffka, Nietzsche, Jung, and Kretschmer. The whole development may be summarized as follows: We have learned to understand man in his situations of real life; to interpret occurrences of the surface as symbols of an inner subconscious life; to see the unity of most life situations; and to recognize the great significance of early childhood in the making of man's mind.—H. M. Bosshard (Clark).

636. Schmalhausen, S. D. Our changing human nature. New York: Macaulay, 1929. Pp. x + 510. \$3.50.—A critical survey of the theory and practice of psychoanalysis, proposing a combination of the Adlerian and Freudian views as the most illuminating psychology available. Part I, "Sex under the Psychoscope," views the changing standards in sex relations and morality, particularly in the last fifteen years, which constitute a veritable sexual revolution, characterized by the separation of sex love from parent love. We are approaching an age of perversion, in which abnormality will become normality. Part II, "Poetry Woos Pathology," applies to literature the profound distinction between realism (dealing with existences) and realization (dealing with values). With the attainment of realization literature will not be an escape from reality, but a fulfillment. At present it is becoming the profoundest of studies in abnormal psychology. References are made to the outstanding among contemporary writers, with psychoanalytic portraits of Shaw, Frank Harris and Mencken. Part III, "The Plight of the Normal Mind," discusses the nature of consciousness, with a review of pre-Freudian conceptions; the sanity of the normal mind; the curative power of psychoanalysis. The latter involves four

factors: dramatic objectification, analytic transference, release of tension, realization. A brief critical view of contemporary psychological and sociological work shows significant tendencies of the new psychology, including the shift of attention from the academic laboratory to the psychiatric clinic; and the interpenetration of medicine and psychology which, with education, opens the new field of educational psychiatry. Part IV, "Re-educating the Conventional Mind," presents "creative morality" as a psychoanalytic philosophy of behavior. Three types of thinkers particularly represent this attitude toward life: psychoanalysts, dramatists and anthropologists.—*M. P. Montgomery* (Faribault, Minn.).

637. Searl, N. *The flight to reality.* *Int. J. Psychoanal.*, 1929, 10, 280-291.—A discussion of the two types of phantasies—the "better than reality" and the "worse than reality." In the first case one has a primary wish-phantasy in which the id derives its pleasure from the internal instead of from the external world; in the second case a punishment-phantasy in which the id derives its pleasure indirectly through the super-ego against the ego or internal world. At the times in which the external reality approximates least to the wish-phantasy and most to the punishment-phantasy we have the neurotic flight from reality. But where punishment-phantasies are very intense and external reality accommodating, there is a flight to reality. Sometimes there is alternation of the two—an important source of ambivalence. The importance of the mechanism in normal and abnormal people is taken up.—*D. Shakow* (Worcester State Hospital).

638. Sharpe, E. *The impatience of Hamlet.* *Int. J. Psychoanal.*, 1929, 10, 270-279.—The author develops the thesis that Hamlet is a tragedy of impatience rather than one of procrastination.—*D. Shakow* (Worcester State Hospital).

639. Stürcke, A. *Conscience and the rôle of repetition.* *Int. J. Psychoanal.*, 1929, 10, 183-192.—Various functions of an inhibitive nature are attributed to conscience. Some of these are: self-criticism, ethical inhibition, sense of guilt, remorse, and self-punishment. However, conscience also acts as positive "force which converts the repetition of an action into self-punishment and remorse."—*D. Shakow* (Worcester State Hospital).

640. Stekel, W. *Sadism and masochism.* New York: Liveright, 1929. (2 vols.) Pp. xvii + 440; xiii + 473. \$10.00.—The polyphony of thought: the thought process shows extraordinary condensation: a conflict precedes the putting of thought into words, ending in most cases in the victory of the reality principle. The greatest resistances appear when the patient manifests the primordial reactions, such as testing the object in the terms "What pleasure can I seize from you?" Predisposition exists, as in all paraphasias. Sado-masochism shows an obsessive character and manifests itself as repetition compulsion. Sadism is a paraphilia in which the will to power is sexually accentuated; in masochism the will to submission is so accentuated. Both serve for the escape from normal sexual relationship and the masking of ascetic tendencies. Sado-masochists

stand between the man and the woman, and cannot decide which direction to take. Hatred is primary to love in man. The child reacts to everything painful with hate; not until we incorporate the strange into ourselves can we love it. Those who suffer become cruel. The lover rationalizes his hate with jealousy. Civilization rests upon the fiction that other persons are better than ourselves. Strict adherence to Freud's method prolongs the analysis and permits the most important complexes to withdraw from the physician's knowledge. Without the physician's intuition, these complexes do not come within the analytic field of vision. The homosexual hates the woman and flees from her, lest he become a criminal toward her. Stekel discusses epilepsy in the light of sadism. It is a life reaction using regression to prevent all progress except that of the disease. The content in attacks is sadistic and primitive. Analysis succeeds in recovering some epileptics. There is reference to the dangers of self-analysis, incomplete analysis, and the practice of analysis by the incompetent. Stekel believes the commonest scotoma of analysis is that related to sadism. There are notes on analyses of the phantasies, "A child is being beaten," "A hand is being beaten," "A woman is being carried." A chapter deals with compassion and one with self-mutilation and self-accusation. Cannibalism, necrophilia and vampirism are treated with case material. The work includes a large number of relatively complete case notes. Stekel presents an optimistic conclusion in terms of education to rule out fear, jealousy and hatred, and to encourage the ability to love.—*L. B. Hill* (Sheppard & Enoch Pratt Hospital).

641. Strickler, C. B. *A quantitative study of post-hypnotic amnesia.* *J. Abn. & Soc. Psychol.*, 1929, 24, 108-119.—Four subjects who showed complete waking amnesia for trance events were experimented on in a systematic manner. The apparent recall amnesia for trance learning, 15 minutes after the completion of the learning and 10 minutes after waking, appears to be about 98%. If the forgetting for similar learning performed in the normal state be deducted from this amount, the recall amnesia appears to be about 80% complete. This is a minimal value for post-hypnotic recall amnesia. The post-hypnotic relearning amnesia appears to be only about 50% complete. A strong trance suggestion that subjects shall learn rapidly in the trance results in a distinct speeding up of the trance learning during the first few learning series. The courses of the practice curves for trance and normal learning appear to be alike.—*C. H. Johnson* (Boston Psychopathic Hospital).

642. Stuart, H. N. *Trends in character research.* *Rel. Educ.*, 1929, 24, 838-842.—The dominant feature in present character research is its scientific character. A brief résumé of character studies is given and a bibliography of 49 titles.—*J. P. Hyman* (Stoneham, Mass.).

643. Theilhaber, F. A. *Blutwunder und Liebeswahn.* (Stigmatization and sexual abnormality.) In *Beiträge zum Sexualproblem.* Berlin: Asy-Verlag, 1929.—In this work dealing with the history of

stigmata, it is suggested that in addition to neuro-pathy vitamin deficiency in the local discharge and low coagulability of the blood serve as responsible factors. Similar clinical phenomena appear after repeated ailments. The psychological cause lies in the substitution and displacement of the sexual impulses. Strong sensuality is demonstrable in practically all the historical instances of stigmata. Jeanne de Chantal was always pursuing clerics, whose attention and love she sought to gain. Madame de la Mothe Guignon, like many others, left questionable memoirs. In any group of famous stigmatics, this wretched, suppressed, erotically laden atmosphere is demonstrable, e.g., in Anna Catharina Emmerich, Veronica Giuliani, Gemma Galgani, Niklutsch. The conversion of eroticism into mysticism is to be looked upon as an anxiety neurosis. Inhibited eroticism joins with the self-preservation and mastery impulses. In the magic power of the god Eros lies the final motive which leads to stigmatization.—F. A. Theilhaber (Berlin).

644. Van Ophuijsen, J. W. H. The sexual aim of sadism as manifested in acts of violence. *Int. J. Psychoanal.*, 1929, 10, 138-144.—The sadistic tendency readily unites with other tendencies which manifest themselves in a similar way. The first of these are hate and revenge, the second is sexual aggression, particularly in men and in women of masculine temperament. The sadism of a violent type (as opposed to the "soiling" type) is a derivative of the second phase of oral development—biting (sucking is the first). The author concludes from his analysis of sadism that it should not be considered as a true antithesis of masochism, and that cruelty is not a feature of pure sadism.—D. Shakow (Worcester State Hospital).

645. Willoughby, R. R. An adaptive aspect of dreams. *J. Abn. & Soc. Psychol.*, 1929, 24, 104-107.—A limited survey of the field reveals no serious rival of the wish theory to be present, but makes it appear probable that much more is implicit in it than appears at first sight; among which the right of the abreactive function to a place, at least under certain circumstances, should be investigated.—C. H. Johnson (Boston Psychopathic Hospital).

646. Wolff, W. Traum und Organismus, Traumtherapie. (Dreams and the organism; therapeutics of dreams.) *Allg. ärzt. Zsch. f. Psychotherap. u. psych. Hygiene*, 1929, 10, 612-630.—Dreams repeating a subject show a development (*Strukturierung*). Swoboda says they have a tendency to appear periodically. Often they manifest the aggravation of a mental disease (in some cases diseases show in dreams only). The development of dreams is illustrated by the dreams of Gilgamesh, the Babylonian hero, and of Richard Hueh (F. Hueh: *Träume*, 1904). The development indicates a process of regression toward a state of serenity, back to the mother according to psychoanalysis, or to the primitive ego (*Ur-ich, Urganzen*). There are evidently three stages: (1) a stage of decay (*Verfall*), or dissociation from the primitive ego (*Draussensein*); (2) the first contact with the primitive ego (*Einkehr in den Vorhof des Gartens vom Ur-ich*); (3) the

final retreat into the primitive ego (*Eindringen und Emporklimmen, Zurückziehen in das Drinnen, bis zur Wanderung im Ur-ich, dem Heimischwerden*). The article tries to verify this classification with two pages of quotations from Friedrich Hueh's dreams. They disclose that a particular process of regression is repeated; the second occurrence manifests a progress over the first. Dreams and sleep have a regulating, regenerative effect upon us. They reestablish the psychophysical unity which through our abstract way of thinking is continually being destroyed. The analysis of dreams must be reduced to a minimum, or else their regenerative power is destroyed. Dreams and sleep, because of their regenerative property play an important rôle in fairy-tales and in the ceremonies of primitive tribes. Dreams disregard every condition of time, space, and form, and the connection between cause and effect, and thus permit the organic vitalizing stream to circulate free from all check. Dreams exaggerate greatly; either real problems are shown with their ultimate consequences, which force the dreamer to a decision (*Grotesktraum*), or real events are lifted to a higher level and thus actuate man to fulfil higher possibilities.—H. M. Bosshard (Clark).

[See also abstracts 453, 454, 461, 464, 478, 493, 496, 507, 510, 535, 542, 546, 564, 653, 658, 682, 689, 707, 723, 742, 776, 814, 863, 917, 920, 925, 926, 932, 933.]

NERVOUS AND MENTAL DISORDERS

647. [Anon.] Conference on mental welfare. *Lancet*, 1929, 216, 921-924.—This is a summary of the discussion and papers read in a conference on the mentally deficient. Papers by Tredgold, Burt, and others are summarized.—W. T. Heron (Minnesota).

648. [Anon.] The problem of mental defect. *Lancet*, 1929, 216, 930.—After 2½ years of investigation it is concluded that in England and Wales there are 8.7 mentally defective persons per 10,000 population. This means that there are about 340,000 persons mentally defective within the meaning of the Mental Deficiency Acts. This is a definite increase in the last two decades.—W. T. Heron (Minnesota).

649. [Anon.] Problems of epilepsy. *Lancet*, 1929, 217, 27-28.—This is a summary of recent work which has been done on epilepsy. The difficulties of this type of investigation are also discussed. We must look to psychology as well as medicine for light upon the problems of epilepsy.—W. T. Heron (Minnesota).

650. [Anon.] Movement of patients in the state institutions for mental defectives and epileptics during the three months ended September 30, 1929. *Psychiat. Quar. (Supp.)*, 1929, 4, 308.—R. R. Willoughby (Clark).

651. Baird, J. H. Palilalia; an uncommon symptom of encephalitis lethargica. *U. S. Vet. Bur. Med. Bull.*, 1929, 5, 374-375.—Report of a case diagnosed as postencephalitic parkinsonism with palilalia added to the clinical picture.—C. M. Louttit (Hawaii).

652. Blackman, E. A. Mental hygiene clinic in the church. *Rel. Educ.*, 1929, 24, 636-639.—A Protestant church conducts a clinic suggested by the Roman Catholic confessional. The requirements are here described.—J. P. Hylan (Stoneham, Mass.).
653. Bohlen, H. Die seelsorgerliche Behandlung der Lungenkranken. (The pastoral care of pulmonary patients.) Innsbruck: Tyrolia, 1929. Pp. 70. R. 1.60.—R. R. Willoughby (Clark).
654. Brauchle, A. Drei Jahre Klinik und Poliklinik der Massensuggestion. (Three years of group suggestion in clinic and polyclinic.) *Munch. med. Woch.*, 1929, 32, 1332-1335.—R. R. Willoughby (Clark).
655. Brown, P. K. Desire or covetus neurosis. *Southwestern Med.*, 1929 (August).—R. R. Willoughby (Clark).
656. Brunswick, R. M. The analysis of a case of paranoia (delusions of jealousy). *J. Nerv. & Ment. Dis.*, 1929, 70, 1-22; 155-178.—A clinical and analytical study of a case of paranoia of the delusional jealousy type, showing that under special structural conditions it is possible to analyse a paranoid process and influence it therapeutically.—R. A. Young (Boston Psychopathic Hospital).
657. Burt, C. The psychological clinic. *Howard J.*, 1929, 2, 200-204.—R. R. Willoughby (Clark).
658. Campbell, K. J. The application of extroversion-introversion tests to the insane. *J. Abn. & Soc. Psychol.*, 1929, 23, 479-481.—The individuals rated did not fall into two distinct classes, the introverts and the extroverts, but into a single group which takes the general form of a normal probability curve.—C. H. Johnson (Boston Psychopathic Hospital).
659. Carlisle, O. L. The etiology of idiopathic (nonorganic) epilepsy. *U. S. Vet. Bur. Med. Bull.*, 1929, 5, 161-173.—Idiopathic epilepsy is a particular and specific way of reacting to the reality of life, namely, by convulsions or the convulsive equivalent. In the convulsive state the individual arrives at oblivion. A discussion of the literature on the genetic, biochemical and psychogenic factors in the etiology of epilepsy is given to support this conclusion.—C. M. Louttit (Hawaii).
660. Claude, H. The legal aspects of general paralysis of the insane. *Int. J. Med. & Surgery*, 1929 (August).—R. R. Willoughby (Clark).
661. Cruchet, E. Post-encephalitic delinquency. *Brit. Med. J.*, 1929, 1028-1030.—R. R. Willoughby (Clark).
662. Davis, J. E. Exercise for the regressed types of the mentally ill. *U. S. Vet. Bur. Med. Bull.*, 1929, 5, 601-603.—Physical exercise, especially in groups, has been successfully used with regressed patients to reawaken an interest in the environment.—C. M. Louttit (Hawaii).
663. Dawson, S., & Conn, J. C. M. The intelligence of epileptic children. *Arch. Dis. in Children*, 1929, 4, 142-151.—R. R. Willoughby (Clark).
664. Dearborn, G. V. N. The psychologist looks at psychiatry. *U. S. Vet. Bur. Med. Bull.*, 1929, 5, 17-25.—A plea for a more scientific spirit of psychiatry, with special emphasis laid on the need for psychological training for psychiatrists.—C. M. Louttit (Hawaii).
665. Debicka, Mme. Etude de l'arriération mentale à l'aide de tests d'exécution. (A study of mental retardation by means of performance tests.) *Hygiène ment.*, 1929, 24, 157-175.—The author tested 54 girls in a school for teachable feeble-minded at Asnières, using an abridged Pintner-Paterson scale composed of 9 performance tests, reconstructions of geometric forms with the aid of a polyhedron, and reconstructions of pictures from fragments pasted on pieces of wood.—Math. H. Piéron (Sorbonne).
666. Decroly, O. Un cas d'alexie et d'agraphie congénitale chez un débile mental. (A case of congenital alexia and agraphia in a feeble-minded patient.) *J. de neur. et de psychiat.*, 1929, 6, 346-362.—The case history of a boy of 14, with a report of the examination of his mental capacities, especially the faculties of reading and writing. A detailed characterological study also is given and the conclusion is reached that the patient is of a disharmonic, apathetic type. The disorders of reading and writing, though outstanding, are parts of a general mental inferiority.—H. C. Sys (New York City).
667. Decroly, O., & Decroly, J. Examen mental dans un cas de myxoedème infantile. (Mental examination in a case of infantile myxedema.) *J. de neur. et de psychiat.*, 1929, 6, 363-368.—A myxedematous boy, 8 years old, showed a mental age of 2 years 10 months. Treatment, by thyroïdin 0.1 gm. a day for two months, had a favorable influence on the affectivity and on the practical activity, but the intelligence has not yet shown any improvement.—H. C. Sys (New York City).
668. Fisher, V. E. An introduction to abnormal psychology. New York: Macmillan, 1929. Pp. x + 511. \$2.60.—The author assumes (1) "that mental abnormality is to be regarded as a purely relative matter," a full understanding of which demands a clear insight into certain transitional phenomena which lie somewhere "between the more normal and the more abnormal." His second point of view is "that mental abnormalities can be most adequately understood and dealt with when viewed as disorders of the personality, of the individual as an integration, rather than as disorders of various mental processes or reactions." Explanations are offered to account for the various types of abnormalities, and when necessary, points of theory are raised and the views of prominent psychologists and psychiatrists cited and discussed. Case studies are presented to make clear the clinical picture of each disease.—C. W. Brown (California).
669. Gill, A. W. Hysteria and the workmen's compensation act. *Lancet*, 1929, 216, 811-814.—"Hysteria is a condition in which the symptoms have been produced by suggestion and are curable by psychotherapy." The author discusses cases of employees who develop hysteria generally as the result of an accident and then demand compensation because of disability. Most of these cases can be speedily cured by treatment consisting of three stages, namely, ex-

planation, persuasion, and re-education. A number of case histories are given and discussed.—W. T. Heron (Minnesota).

670. Gilliland, A. R. The use of psychiatry in industry. *Rel. Educ.*, 1929, 24, 650-651.—A brief account of the use of psychiatry as employed in a department store, based on V. V. Anderson's *Psychiatry in Industry*.—J. P. Hylan (Stoneham, Mass.).

671. Glauber, R. [Fear's neurosis of the vegetative nervous system.] *Monatssch. f. Kinderhk.*, 1929 (June).—R. R. Willoughby (Clark).

672. Good, T. S. Pituitary cachexia in a case of tabes dorsalis. *Lancet*, 1929, 216, 765-767.—Necrosis of the anterior part of pituitary is accompanied by premature senility, torpor and apathy, and marked sleepiness. It has been suggested that these symptoms be given the name "præhypophysial depression."—W. T. Heron (Minnesota).

673. Haeberlin, O. Bemerkungen zum Gutachten Würfler. "Aberglaube und Prozessfähigkeit." (Notes on the Würfler decision. "Superstition and actionability.") *Allg. ärzt. Zsch. f. Psychotherap. u. psych. Hygiene*, 1929, 2, 697-698.—A positive demonstration of pathological superstition is not attainable in this case. The ideational life of the murderer did not differ markedly from the popular beliefs of her community. Apparently she was convinced that her husband's cardiac attacks showed he was a victim of demoniacal magic. This perseverating idea undoubtedly had the strength of a delusion even if it was not such in origin.—G. W. Hartmann (Pennsylvania State).

674. Harrowes, W. McC. Personality and psychosis: a study in schizophrenia. *J. Neur. & Psychopath.*, 1929, 10, 14-20.—R. R. Willoughby (Clark).

675. Heuyer, G., & Lamache, A. Le mentisme. (Mentism.) *Encéph.*, 1929, 24, 325; 444-465.—Mentism consists in vivid representations in auditory or visual form which impose themselves on the subject's will. Its principal characteristic is that the subject is conscious of the morbid nature of the disorder. Diagnosis of obsession is possible though very difficult. The obsession is limited and localized, remaining isolated from other coexistent obsessions with which it is juxtaposed through contiguity. In mentism, however, the mental pictures, auditory or visual, follow one another as an unwinding of memories, like a film whose separate scenes are linked together. Mentism is not linked with morbid constitution. The subject's personality takes no part in the perception of the mental representations which are imposed on him or in the diffused anxiety which results from this obsession. Mentism is an accidental symptom which belongs to a passing infection or which is mixed with other symptoms of a definite illness. 21 cases are described.—Math. H. Piéron (Sorbonne).

676. Hill, T. R. Juvenile behavior disorders in epidemic encephalitis. *Lancet*, 1929, 216, 968-971.—The symptom following epidemic encephalitis is one of a loss of inhibition over the primary emotions and the innate tendencies toward instinctive behavior. Intelligence remains intact, but behavior of

the patients is characterized by pursuit of their own way, impulsiveness, restlessness, lack of self-control, lack of concentration, disobedience, and defiance. These symptoms appear in children but rarely in adults. It has been found that bulbo-capnine relieves the symptoms as long as it is regularly administered. The pharmacology of this drug is discussed. The evidence indicates that the drug has a depressing effect upon the thalamus and the globus pallidus.—W. T. Heron (Minnesota).

677. House, R. E. Diagnosis and treatment of insanity by the detection of delusion. *Texas State J. Med.*, 1929 (August).—R. R. Willoughby (Clark).

678. Jaeger, M. H. Mental hygiene in the Y. W. C. A. *Rel. Educ.*, 1929, 24, 640-642.—The experience of the Chicago Y. W. C. A. secretary has suggested the need of better preparation for giving advice to the members along the line of mental hygiene. A "Secretaries' Seminar on Mental Hygiene" is here described.—J. P. Hylan (Stoneham, Mass.).

679. Kantor, J. L. Neurogenic and psychogenic disorders of the alimentary canal. *J. Nerv. & Ment. Dis.*, 1929, 70, 28-42.—R. R. Willoughby (Clark).

680. Kapp, F. Zur psychischen Hygiene. (Concerning mental hygiene.) *Arch. f. Religionspsychol.*, 1929, 4, 341-344.—R. R. Willoughby (Clark).

681. Kogerer, H. Was kann der praktische Arzt auf dem Gebiete der Psychotherapie leisten? (What can the practicing physician do in the realm of psychotherapy?) *Wien. klin. Woch.*, 1929, 41, 1332.—R. R. Willoughby (Clark).

682. Laforgue, R. The mechanisms of isolation in neurosis and their relation to schizophrenia. *Int. J. Psychoanal.*, 1929, 10, 170-182.—Various psychoanalytical notions of schizophrenia and suggestions for treatment are offered. According to the author, the patient finds it necessary constantly to reproduce an affective situation which is of a painful nature. This is along the lines of self-punishment, masochism, or self-destruction. The mechanism of isolation fits in well with this craving for punishment. The latter serves to lighten the guilt burden (deriving from the Oedipus conflict) or to remove it entirely. A number of cases are cited to illustrate the mechanism. Therapeutically the aim is "to remove the possibility of punishment and so gradually undermine the tendency in the patient to compel others to confine him. Having succeeded in this, we should then have to make him take up the battle with his feelings of guilt and inferiority."—D. Shakow (Worcester State Hospital).

683. Lazell, E. W., & Prince, L. H. A study of the causative factors in dementia praecox. The influence of the blood and serum on embryological cells. A preliminary communication. *U. S. Vet. Bur. Med. Bull.*, 1929, 5, 40-41.—A brief account of experiments to test the hypothesis "that dementia praecox in particular and the so-called functional psychoses in general, are due to endogenous toxins, either single or in groups, which are of endocrine origin, and are of such a nature that their presence can be proven by laboratory procedure." The procedure consists in subjecting frog tadpoles to a

1:1000 concentration of blood serum. The early results reported show that the tadpoles all die when treated with serum from dementia praecox patients, but are not affected by serum from normal males.—*C. M. Louttit (Hawaii)*.

684. Leroy, A. *Coprophagie de nature anxieuse*. (Coprophagy based on anxiety.) *J. de neur. et de psychiat.*, 1929, 6, 339-342.—The case report of a woman, 52 years old, who had been suffering from migraine since the age of 14 and who was at the time of the examination in her second period of depression, the first having occurred at the age of 24. There was anxiety and an exaggeration of the habitually marked tendency toward cleanliness. The coprophagy in this patient is considered to be an absurd means of satisfying her compulsion not to soil herself.—*H. C. Sys (New York City)*.

685. Lévy-Valensi, J., & Rigot, D. *Louvel le magnicide*. (Louvel the magnicide.) *Hygiène ment.*, 1929, 24, 125-150.—A study of the medico-legal aspects of the psychopathology of Louvel, the assassin of the Duc de Berry. Louvel was an insane altruist, belonging to the category of the magnicide type, i.e., the insane paranoiac who is forced by an irresistible power to commit a crime. He should have been judged irresponsible.—*Math. H. Piéron (Sorbonne)*.

686. Long, P. L. The unfolding of a psychoneurosis. *U. S. Vet. Bur. Med. Bull.*, 1929, 5, 668-674.—Conflicts unrecognized or disguised by rationalization or repressed because we will not recognize them are the source of neurotic disorders. A detailed history of a psychasthenic patient whose illness was attributable to a repressed conflict in his youth illustrates this thesis.—*C. M. Louttit (Hawaii)*.

687. Lyon, A. M. Heredity in mental diseases. *Kentucky Med. J.*, 1929, 3, 473-482.—*R. R. Willoughby (Clark)*.

688. Macklin, M. T. The inheritance of mongolian idiocy. *Amer. J. Med. Sci.*, 1929 (September).—The author concludes that mongolian idiocy is due primarily to germinal and not environmental causes, and that the usual named etiologic factors, such as syphilis, mental or physical suffering of the mother during pregnancy, advanced age of the mother or her reproductive exhaustion, or a difference in age between mother and father, are insufficient to account for the observed facts. The conclusion is reached that while mongolian idiocy is due to hereditary factors, it does not fit the scheme of a simple Mendelian unit; however, the hereditary behavior follows expectations if the trait were based upon five pairs of recessive factors, or upon two dominant and four recessive factors, each carried in a different chromosome. It is, however, not claimed that the similarity suggested constitutes adequate proof of this basis and mode of inheritance.—*R. R. Willoughby (Clark)*.

689. MacLachlan, D. R. Group personality in neurotics. *J. Neur. & Psychopath.*, 1929, 9, 320-336.—*R. R. Willoughby (Clark)*.

690. Marie, A. *L'art et la folie*. (Art and madness.) *Rev. scient.*, 1929, 67, 395-398.—When an artist is deranged, his attention usually turns towards

forms of primitive art (alterations of perspective, the two eyes seen in a profile, a multiplication of feet to express running, etc.). The non-artistic insane draw fragmentary pictures similar to children's drawings and to graffiti.—*Math. H. Piéron (Sorbonne)*.

691. Noica, —. Sur le "déficit intellectuel spécialisé" dans l'aphasie sensorielle de Wernicke. (On the "specialized intellectual deficit" in the sensory aphasia of Wernicke.) *J. de neur. et de psychiat.*, 1929, 6, 331-338.—A discussion of P. Marie's theory that in sensory aphasia there is not only a loss of the sense of meaning of words but also a marked impairment of the general intellectual capacity. From his own experience the author arrives at the conclusion that patients with severe sensory aphasia have lost (1) the memory of evocation of words, (2) the memory of images previously acquired by the auditory and visual senses, (3) to a great extent the auditory and visual perception. Results of case examinations are presented in corroboration of this view.—*H. C. Sys (New York City)*.

692. Oesterlen, U. *Psychogenie*. (Psychogenia.) *Ärzt. Sachverst.-Ztg.*, 1929, 35, 235-238.—The author deems it important to retain the term "hysteria" and not to substitute "psychogenia" for it as is attempted in certain quarters.—*G. W. Hartmann (Pennsylvania State)*.

693. Paskind, H. A. Brief attacks of manic-depressive depression. *Arch. Neur. & Psychiat.*, 1929, 22, 123-134.—*R. R. Willoughby (Clark)*.

694. Patry, F. L. The diagnosis and treatment of post-encephalitic Parkinsonism, with case reports. *J. Nerv. & Ment. Dis.*, 1929, 69, 617-641.—*R. R. Willoughby (Clark)*.

695. Pease, G. E. Sidelights on the etiology of a psychosis as revealed in an adolescent's diary. *J. Abn. & Soc. Psychol.*, 1929, 24, 28-31.—Lack of parental affection during childhood caused the subject to feel he was different from other people.—*C. H. Johnson (Boston Psychopathic Hospital)*.

696. Pringle, J. C. Control of mental disease. The functions of experts and poor law. *Eug. Rev.*, 1929, 21, 171-179.—The 1929 Report of the Mental Deficiency Committee is criticized, chiefly for its attack upon the Poor Law Guardians.—*B. S. Burks (Stanford)*.

697. Richter, W. G. Manic praecoxes. *U. S. Vet. Bur. Med. Bull.*, 1929, 5, 118-121.—Dementia praecox and manic-depressive psychoses are not mutually exclusive entities, although they are usually treated as such. It is suggested that diagnosis of such cases should take the possibility of overlapping into consideration, and not place the patient in a sharply delimited group. Illustrative cases in the overlapping region are given.—*C. M. Louttit (Hawaii)*.

698. Sanz, E. F. [The nosological problem in chronic mania.] *Arch. Med. Cir. y Especialidades*, 1929 (May 25).—*R. R. Willoughby (Clark)*.

699. Schwarz, O. *Medizinische anthropologie*. (Medical anthropology.) Leipzig: Hirzel, 1929. Pp. 375.—The goal in the practice of medicine is to aid the sick. That of medical research is to arrive at a

complete understanding of the sick, both as individuals and as members of the human race. This latter goal is still far from realization; in fact one must feel that progress toward it is frequently halting and circuitous. The last half of the nineteenth century was devoted to the accumulation of a great mass of discrete scientific facts—facts of physiological chemistry, bio-chemistry, and allied fields. It is now essential that these be organized into a philosophical system, which may prove to be of more or less practical value. To this organization the field of anthropology can contribute material of unquestionable value. The object of this book is to set forth such a philosophy of medical anthropology. It concerns itself with the fundamental principles of individual progress, and endeavors to bring these into a significant relationship. It discusses man as a part of nature, as a creator of civilization, and as a member of the community. It strives to set forth the fundamental principles of medicine, and devotes a final chapter to a summary of the intellectual trends of present-day medicine.—*H. Marshall* (Stanford University Medical School).

700. Skottowe, I. The management of the psychoses of middle life. *Lancet*, 1929, 217, 167-169.—The development of psychoses in persons of 40 to 60 years of age is not uncommon. This condition is not necessarily associated with menopause, since it occurs in both sexes. In the mental examination of these patients three fields should be investigated, namely, (1) the emotional state or mood of the patient; (2) what the patient is thinking about, that is, the content of thought or mental trend; (3) the state of his purely intellectual functions. Depending upon which of these three fields the chief symptoms are found to occupy, the patient may be said to have an affective disorder, paranoid psychosis, or organic psychosis respectively. In affective disorders the prognosis is good. The paranoid psychoses are unfavorable, and call for admission to a hospital. The organic psychoses may be associated with disease of the brain or with other somatic diseases. The psychoses may be cured, or at least arrested, upon the removal or arrest of the diseased condition. Specific suggestions are made by the author for examination and treatment of these various disorders.—*W. T. Heron* (Minnesota).

701. Smoot, G. A. The law of insanity. Kansas City: Vernon Law Book Co., 1929. Pp. xxiv + 635. Apply.—The emphasis of this book is legal rather than psychological and presents the actual status and basis of the law of insanity. It is divided into three sections: (1) *The Status of Non Compos* (i.e., of the legally insane person) as an *Individual*, which, after a preliminary discussion of the history, nature, forms, and causes of insanity, covers proceedings to determine insanity, and care and custody of the insane; (2) *Status of Non Compos as a Member of Society*, treating of status with reference to property rights, obligations, business relations, marriage, torts, criminal responsibility, and right to devise (bequeath); (3) *Status of Non Compos before the Courts*, discussing especially status as a litigant and as a witness. The law or laws with re-

gard to each point are stated, and the consensus of legal opinion, and the reason for this opinion, made clear where available. "The principles of law governing the rights and responsibilities of the insane in the state and federal courts of the American Union are almost entirely an outgrowth of the English common law, supplemented by local codes and statutes. While there are decided conflicts between some of these courts as to some important principles, there is an astonishing uniformity in the main. Therefore, we think that the composite system reflected in a majority of the decisions of these courts may be presented with confidence as the controlling law on the subject in this country." The division of the book into numbered paragraphs facilitates its use as a reference work; there are also a table of contents, a subject index, and a 40-page alphabetical index to cases cited in the text.—*E. M. Pilpel* (Institute of Human Relations, Yale).

702. Speer, E. Bemerkungen zum Gutachten Würfler. "Aberglaube und Prozessfähigkeit." (Notes on the Würfler decision. "Superstition and actionability.") *Allg. ärzt. Zsch. f. Psychotherap. u. psych. Hygiene*, 1929, 2, 697-698.—Author claims that a paranoiac condition was present in this case. He doubts if a non-psychopathic person in this era could succumb to a belief in witchcraft. Such views are acceptable only to schizoid psychopaths. In accordance with the modern legal code, exculpation because of irresponsibility is demanded.—*G. W. Hartmann* (Pennsylvania State).

703. Stoneman, E. T. State psychological clinic; annual report for the year June, 1927-28. Perth, Western Australia: Dept. of Public Health, 1928. Pp. 24.—The clinic conducts psychological, medical, psychiatric, physical and related tests for people applying for them. It has been cooperating with the educational, criminological, and other agencies of the government in trying to care for both the defective and the bright. A re-standardization of several tests such as the Pressey X-0, Terman vocabulary, Burt reasoning, Healy picture completion and Burt's analogies, opposites, and synonyms has been carried out in an effort to make them more adaptable to local conditions. The detailed results are included in this report. The Pressey Fears test was shown to be valuable "as a means of identifying children who fail to progress satisfactorily in school, in spite of fair ability in a number of subjects." There is an attempt to found an institution for the care of epileptic children. The prisons are about to institute psychological clinics. Information on the organization of the clinic and its relations with various other state organizations is given.—*N. L. Munn* (Pittsburgh).

704. Tilney, F. A comparative sensory analysis of Helen Keller and Laura Bridgman. I. Mechanisms underlying the sensorium. *Arch. Neur. & Psychiat.*, 1929, 21, 1227-1236.—A discussion and criticism of various theories of sensibility are offered, including Head, Parsons, Kappers, and Boring. The nature of sensation is discussed by the author, who gives two values to sensibility, discriminative and affective, and attributes to the former an in-

herently directive or guiding influence and to the latter an inherent protective influence. A classification of the studies made contains two divisions, (1) body sensibility, and (2) contact sensibility.—*E. C. Whitman* (Boston Psychopathic Hospital).

705. Tilney, F. A comparative sensory analysis of Helen Keller and Laura Bridgman. II. Its bearing on the further development of the human brain. *Arch. Neur. & Psychiat.*, 1929, 21, 1237-1269.—An analysis and comparison of the sensory equipment of Helen Keller and Laura Bridgman show them to be quite close to the normal average in those senses which could be tested; any difference between the two seems to have been the result of different training rather than any inherent differences. Considering their achievements and the fact that they had considerably less sensory equipment than the normal average individual, it would seem that the human brain is still in an early stage of evolution and has not reached the full development of its capacities.—*E. C. Whitman* (Boston Psychopathic Hospital).

706. Van Bogaert, L., & Van den Broeck, J. Sclérose latérale amyotrophique ou myasthénie bulbo-spinale avec exaltation des réflexes tendineux et contractions fibrillaires. (Amyotrophie lateral sclerosis or bulbo-spinal myasthenia with exaggerated tendon reflexes and fibrillary contractions.) *J. de neur. et de psychiat.*, 1929, 6, 380-382.—The differential diagnosis is discussed in the case of a patient whose disease began with a progressive deafness of central type, followed by visual disturbances and by a very marked fatigability of the extremities. 3 years after the onset the main symptoms consisted of (1) a beginning lateral optic atrophy; (2) an extensive affection of almost all cranial nerves; (3) a generalized muscular atrophy, predominant in the facial, scapular and peroneal muscles, with fibrillary contractions, muscular hyperexcitability and reaction of degeneration; (4) a marked exaggeration of the tendon reflexes, with clonus and Babinski in the left foot.—*H. C. Sys* (New York City).

707. Van Schelven, Th. Psychiatry and psychoanalysis. *Int. J. Psychoanal.*, 1929, 10, 357-362.—The author discusses the relations of psychiatry and psychoanalysis, using Freud's analogy of histology and anatomy, which he develops. Whereas in psychiatry the clinical picture is the principal thing, in psychoanalysis it is the motivation. The analyst thinks in purely psychological terms and is not troubled by the psychophysical problem. The psychiatrist, on the other hand, has to keep both the somatic and psychic factors in mind. "Psychoanalysis is not a medical science, far less a section of psychiatry. It is a psychological trend, a pure mental and not a natural science." Psychoanalysis meets psychiatry on the field of the psychology of the psychoses, where both have to make concessions. Another way of looking at it is that the attitude of the psychoanalyst resembles that of the historian to ancient ruins. It is the fragments which interest him. The psychiatrist on the other hand is like the archeologist, in that only the monument interests him.—*D. Shakow* (Worcester State Hospital).

708. Van Valkenburg, C. T. Zur Pathologie mnestischer Störungen allgemeiner und besonderer Natur (Farbensinn) nach Hirntrauma. (The pathology of memory disturbances of a general and particular nature (color sense) after brain trauma.) *Schweiz. Arch. f. Neur. u. Psychiat.*, 1929, 23, 266-283.—An attempt is made to explain an "amnesic symptom complex" following brain lesion (sagittal fracture of the skull in the left parietal and also in the base) on the basis of its constituent elements. The following findings are used in the explanation: (1) a partial, predominantly right-sided hemianopsia; (2) a partial achromatopsia limited chiefly to green, brown and red; (3) insufficiency and lack of color imagery; (4) a memory disturbance of threefold character: (a) a general, partial amnesia, especially for objects and experiences of a very personal nature; in order to explain this the author assumes an instinctive action manifesting itself in the behavior of the patient which has been changed by the accident; (b) an amnesic (sensory) aphasia of the usual sort; (c) a "selective" amnesia for the meaning of the characteristic of each color the perception of which is usually disordered. It is not made dependent upon ordinary amnesia aphasia in the narrow sense, but upon an insufficiency in the euphoria of the word in question which is altogether possible, but in a brain whose general memory function is injured the special innervation of chromatopic origin is lacking. A detailed study of the topical diagnosis of the traumatic lesion is omitted because no section was made.—*M. R. Lambercier* (Geneva).

709. Vinciguerra, M. Voluntary mutism. *J. Med. Soc. of N. J.*, 1929, 26, 395-398.—*R. R. Wilmoughby* (Clark).

710. Walshe, F. M. R. Disorders of movements. *Lancet*, 1929, 216, 963-968.—This article is an attempt to show that the spasticity of hemiplegia and that of decerebrate rigidity are physiologically identical.—*W. T. Heron* (Minnesota).

711. Westburgh, E. M. Psychogalvanic studies on affective variations in the mentally diseased. *Arch. Neur. & Psychiat.*, 1929, 22, 719-736.—The psychogalvanic measurements show real promise of diagnosing, suggesting methods of therapy and yielding checks on the effectiveness of therapeutic measures: (1) by disclosing differences in quality and magnitude of responses peculiar to the various mental groups; (2) by indicating the significant experiences which may have caused or contributed to the psychoses; (3) by indicating, a few days or a week before it is clinically observable, that another attack of mania or depression is beginning, or that improvement is taking place, and (4) by indicating whether each application of a therapeutic measure is having a favorable or an unfavorable effect on the patient.—*E. C. Whitman* (Boston Psychopathic Hospital).

712. Wile, I. S. The orientation of conduct disorders. *J. Abn. & Soc. Psychol.*, 1929, 23, 434-441.—To talk and to think solely in terms of biology, or endocrinology, or sociology, or psychogenesis or the like results in a serious limitation of viewpoint. It is the recognition of the child in a setting which constitutes a first step towards orientation. Behavior is

the expression of adjustment to relationships. Some of these originate spontaneously within the human mechanism in response to biologic stimuli, but the major group of behavior difficulties appear to rise from conflicts between man's biologic and social organization. Treatment allocates the general problem theoretically in relation to the various forms of activity that are derived from the biologic plane.—*C. H. Johnson* (Boston Psychopathic Hospital).

713. Wittkower, E. *Grenzen, Möglichkeiten und Erfolge poliklinischer Psychotherapie.* (Limits, feasibility and success of polyclinical psychotherapy.) *Klin. Woch.*, 1929, No. 5, 197-202.—*R. R. Willoughby* (Clark).

714. Woods, A. R. *Encephalography.* *U. S. Vet. Bur. Med. Bull.*, 1929, 5, 26-30.—Encephalograms were taken after injection of air into the ventricles by a lumbar puncture method. Histories with interpretation of the plates are given for ten cases of epilepsy.—*C. M. Louttit* (Hawaii).

715. Worster-Drought, C., & Allen, I. M. *Congenital auditory imperception (congenital word-deafness).* *J. Neur. & Psychopath.*, 1929, 9, 289-319.—*R. R. Willoughby* (Clark).

716. Würfler, P. *Pathologischer Aberglaube, Gutachten über Prozessfähigkeit.* (Pathological superstition, a legal advice on legal ability.) *Allg. ärzt. Zsch. f. Psychotherap. u. psych. Hygiene*, 1929, 10, 630-638.—A woman is ruining her property because of a law suit against her tenant. She insists that her tenant killed her husband by occult means and has to leave her house. The author discusses whether she has legal competence or not. He concludes that she has not.—*H. M. Bosshard* (Clark).

717. Zeligson, G. *Effets de l'ablation des hémisphères cérébraux.* (The effects of ablation of the cerebral hemispheres.) *Rev. de méd.*, 1929, 46, No. 2.—The author removed the cerebral hemispheres of two dogs, leaving intact as much as possible of the central gray nuclear region. Five days later the dogs were able to walk and to drink milk. The sense organs were very little affected. Audition, cold contact, vision, and olfaction persisted. The dogs slept most of the time. They reacted normally to anger, fear, and joy. The author succeeded in arousing a flow of gastric juice by means of simulated food. Conditioned reflexes persisted. The first dog lived one year after the operation and the second four years.—*Math. H. Piéron* (Sorbonne).

[See also abstracts 484, 594, 614, 628, 742, 759, 761, 772, 844, 865, 867, 892, 910, 915, 918, 926.]

SOCIAL FUNCTIONS OF THE INDIVIDUAL

718. Bobertag, O. *Ist die Graphologie zuverlässig?* (Is graphology reliable?) Heidelberg: Kampmann, 1929. Pp. 86.—Bobertag gives us a careful analysis of the arguments for and against graphology as a means of character study and of vocational guidance. He is critical of hasty generalizations that have been made, and of the use of handwriting as a single determinant of personality judgment. The high suggestibility of the mind has led to conclusions too readily accepted. He suggests the great need of a follow-up program to test out judgments made, with an application of the methods of experimental psychology with good control technic.

The author carries out an investigation to ascertain reliability of judgment, using the handwriting of five faculty members of the Central-Institut für Erziehung und Unterricht at Berlin. These five specimens he submits to six well-known graphologists for analyses of character. The writers were unknown to the judges. The analyses of character were then submitted to a number of colleagues to whom the writers were well known, for their judgment of the accuracy of the personality analyses. Tabulations reveal the results. He discusses the difficulties of a procedure like this and the uncertainties of human judgment, with suggestion for betterment of technic. Bobertag sees possibilities in graphology, but does not believe that the science is well enough developed to make conclusions highly reliable at present.—*A. B. Herrig* (Central State Teachers College).

719. Davies, A. E. *The summum bonum: an experimental study.* *J. Abn. & Soc. Psychol.*, 1929, 24, 41-62.—There exists a plurality of moral ideals which are incapable of reduction to a single principle. The conclusions are opposed to a widespread notion that the moral life has a uniform and standardized mode of expression. If the data of this investigation are taken as an expression of the existing moral needs and tendencies of man, the prevalence of the absolutist theory may be considered as one of the reasons why the moral average, in comparison with other human activities, is so low, and why it is difficult to arouse an active interest in moral problems. It seems evident that the concrete individual cannot be much longer snubbed by ethical philosophers, and that thinking on moral questions will eventually express itself in some form of humanistic doctrine.—*C. H. Johnson* (Boston Psychopathic Hospital).

720. Fenton, N. *The diagnosis "Hickman."* *Survey*, 1929, 57, 349-350.—*R. R. Willoughby* (Clark).

721. Galitz, C. A. *A study of assimilation among the Rumanians of the United States.* New York: Columbia Univ. Press, 1929. Pp. 282. \$4.00.—This book is based upon (1) a survey of 150 Rumanian families, (2) interviews with leaders of Rumanian colonies and heads of American industries and social agencies in contact with the immigrants, and (3) a study of the Rumanian press in the United States from January, 1927, to December, 1928. The author holds that the Rumanians are for the most part assimilable. Complete assimilation, however, is not a rapid process. Economic adjustment generally comes first; cultural adaptation takes longer, but is often achieved within three generations; while it is difficult to predict the length of time required for biological amalgamation. This last phase, however, though it hastens assimilation, is not a condition *sine qua non* of the assimilative process.—*D. Katz* (Princeton).

722. Gatz, F. M. *Musik-Asthetik in ihren Haupt-richtungen.* (Musical esthetics and its chief tendencies.) Stuttgart: Enke, 1929. Pp. 544. M. 22.—*W. S. Hunter* (Clark).

723. Gruehn, W. *Seelsorgerliche Analysen.* (Pastoral analyses.) *Arch. f. Religionspsychol.*, 1929, 4, 299-340.—R. R. Willoughby (Clark).

724. Guardini, B. *Logik und religiöse Erkenntnis.* (Logic and religious knowledge.) *Schuldgenossen*, 1929, 9, 179-207.—A. Römer (Leipzig).

725. Hacker, E. *Criminality and immigration.* *J. Crim. Law & Criminol.*, 1929, 20, 429-438.—The greater incidence of crime among the foreign born is partly explained by the selective factors influencing immigration. Immigrants are a selected group as to economic conditions, age, sex, occupation, and education.—D. Katz (Princeton).

726. Hart, H. *Current research projects.* *Amer. J. Sociol.*, 1929, 35, 445-468.—The returns from the American Sociological Society 1929 census of current research projects as arranged by Dorothy Hankins under the direction of Hornell Hart. An attempt has been made to give the subject, the scope, the author, and his address whenever the information has been available. There are 21 titles under *Human Nature and Personality*, 1 under *Psychology of Sex*, and 2 under *Mental Disease and Deficiency*, which are of psychological interest.—(Courtesy Amer. J. Sociol.)

727. Heber, J. *Die phänomenologische Methode in ihre Bedeutung für Religionsphilosophie.* (The phenomenological methods and their significance for the philosophy of religion.) *Christ. u. Wiss.*, 1929, 5, 366-379.—A. Römer (Leipzig).

728. Heinlein, C. P. *Critique of the Seashore consonance test: a reply to Dr. Larson.* *Psychol. Rev.*, 1929, 36, 524-542.—The criteria suggested and employed in the consonance test devised by Seashore are ambiguous and do not fulfill the purpose for which they are devised. The experimental technique governing the giving of the tests is shown to be faulty in a number of ways. Correlations obtained by investigators between the consonance tests and musical ability as determined in other ways are too low to be of any significance. The Seashore tests leave out of account a number of important facts true of musical appreciation, viz., that feeling tone cannot be neglected and is a dynamic affair, subject to change with the times; musical training alters the judgment of the subject; it is impossible artificially to separate out certain aspects of the total clang, which the experimenter believes should be the basis of consonance judgments, and expect subjects to judge only these. A number of other assumptions made by Seashore and Larson are shown to be unwarranted if the consonance test is to possess any scientific validity.—H. Helson (Bryn Mawr).

729. Hollander, B. *The origin of music.* *Ethol. J.*, 1929, 14, 59-68.—Much music, including whistling and humming of tunes and singing by birds, results from an overflow of energy. "The relation between courtship and singing, so far as it can be shown to hold, is not a relation of cause and effect, but a relation of concomitance, being simultaneous results of the same cause." "All music is originally vocal." "Music probably originated from rhythmic dancing movements which were accompanied by a chant."—F. M. Teagarden (Pittsburgh).

730. Jancke, E. *Das Wesen der Ironie. Eine Strukturanalyse ihrer Erscheinungsformen.* (The essence of irony. A structural analysis of its varieties.) Leipzig: Barth, 1929. Pp. 112. Rm. 4.80.—This work aims to give the necessary philosophical foundation for a division of the historical forms of irony and to show how this may have a characterological function in connection with various types of poetic mind. The manner in which this is to be interpreted is briefly sketched in the second part on "Irony as a life attitude." This is "an adjustment of the subject to the things of the world." The truly ironical appears when the subject is free and superior to the things of the world. If this is not the case then the impure ironical forms appear (e.g., apathy, blaséness, sarcasm, cynicism). The rationale of these cleavages is established in the first part of the volume. The first chapter aims to determine the elementary structure of the ironical judgment. In connection with A. Pfänder's schema ("Psychology of the Dispositions") the structure of the ironical judgment is extended so that to the intended disposition effect an apparent effect is added, which contrasts with the first and thus constitutes the comic effect of irony. In the second chapter structures resembling irony (lying, sarcasm, scorn) are distinguished from it, so that in the third chapter the peculiarly essential factor of irony itself is brought out: "The ironist must have the entire ironical situation in consciousness" (ideal observer). The fourth chapter distinguishes irony from humor.—R. Jancke (Aachen).

731. Kelda, I. D. *K probleme proisxozhdeniya yazyka.* (The problem of the origin of language.) *Vestnik Kommunisticheskoi Akademii*, 1929, 33, 112-144.—The literature connected with various theories in regard to language formations is reviewed. Most of the theories do not satisfy the author, who analyzes them from a materialistic point of view. Finally the concepts of N. Y. Marr are taken up; he published his theory of the origin of language in 1926 in the Proceedings of the Oriental Institute of the Soviet Republics. Marr studied the language of the less known tribes of the Caucasus, which is extremely primitive and is still in the process of early formation. Language originates in the primitive society when man first begins to modify his environment; in other words, when he begins to work. The primitive man looks upon work as magic because he does not expect the results which he gets, and because work itself results in profound changes in the individual. The whole organism, including the vocal apparatus, participates in the primitive production. Collective effort is always accompanied by the three original arts—dance, music and vocal speech. Previous to this in the history of evolution man used gestures as form of social intercourse. Vocal speech must have begun with the Stone Age, when man began to make implements. Language development goes parallel with the increase of collective, human activities.—J. Kasanin (Boston Psychopathic Hospital).

732. Kinder, E. F. *Scientific method in social psychology.* *J. Abn. & Soc. Psychol.*, 1929, 24, 63-

73.—The student of social psychology has attempted to use the same scientific approach as in the exact sciences—considering the subject as remote, or apart, from himself. The data of the social sciences are found to be those of experience—common experience—which can be recognized by the individual only as he lives them. The expression may be pathological and non-functioning, as in unfounded fears and hopes, or it may be more healthful and socially integrated, as in the coordinated performance of a common task, but in either case it is the experience which becomes the subject-matter of a social investigation. For the social psychologist, the only possibility for investigation of his material lies in submitting the conditions of control those social interrelationships of which he is an element. The social scientist, within the social organism of which he is a part, may become sensitive to the presence of those attitudes and impulses which, in their extreme form, are responsible for the major social disorders of the day.—C. H. Johnson (Boston Psychopathic Hospital).

733. Kohlstock, P. Religion—ein Narkotikum? (Religion—a narcotic?) *Ethik*, 1929, 6, 11-20.—Freud overlooks the fact that Christianity brings not only consolation but life to all.—A. Römer (Leipzig).

734. Levonian, L. Moslem mentality. Boston: Pilgrim Press, 1929. Pp. 245. \$2.50.—The Moslem mentality of tradition and fact is described, together with an analysis of its religious foundation. The Turks have attempted to reconcile this mentality with the science and political principles of Western Europe. This reconciliation they now believe to be impossible. They want to be completely Westernized. The root of this desire is a spirit of nationalism. This nationalism is realized ruthlessly, untempered by Western humanitarianism. The Turks fail to see the important place of morality in Western business, education, and government. The revolt against the Moslem religion finds a fundamental basis in the belief that religion has no part in civilization. The vital problem with the Moslem peoples is "to change hatred into love, hardness into compassion, sensuality into purity, falsehood into truth." Christianity has not carried to Turkey its inherent message, but rather its doctrinal perplexities. The Moslems need Western morality, "Christianity as a Way of Life."—W. O. Poole (Worcester, Mass.).

735. Liber, A. F. Some methodological suggestions for the psychological study of ethics. *J. Abn. & Soc. Psychol.*, 1929, 24, 3-7.—In order that a set of ethical values may be scientific, it is necessary: (1) to admit their postulate-like qualities, (2) to admit them to the criticism of scientific logic, with a view to eliminating all those which can be derived from more general propositions, in favor of the latter; and retaining only those whose derivatives are best suited to the conditions in which the person or his group is living. Because of the intimate connection between ethical values and factors, such as conflicts, upon which depends our affective equilibrium, the tendency to evade these processes is very strong. Rationalization is the usual method of evading them. The hypothesis is proposed that a

positive correlation exists between the lack of generality of a set of ethical values and the tendency to rationalize them. The function in society of the applied psychologist depends to a certain extent on his admission of the above principles and on his use of them in formulating his attitude towards ethics and in undertaking their systematic investigation from the psychological point of view.—C. H. Johnson (Boston Psychopathic Hospital).

736. Maire, G. Aux marches de la civilisation occidentale. (On the progress of western civilization.) Paris: Baudinière, 1929. Pp. 222. 15 fr.—Will our civilization save itself? And to what extent will writers aid in this salvation? Does literary work afford anything more than a theoretical forecast? Such are the main questions asked by the author in his book devoted to Henri Bergson, Henri Massis, Guy-Félix Fontenaille, Gaston Riou, André Thérive, Henri Clouard, and Paul Vulliaud. These men differ widely from one another, but a common concern for humanity has led them to a clear conception of a European civilization which they defend.—Math. H. Piéron (Sorbonne).

737. Mohr, G. J., & Gundlach, R. H. A further study of the relation between physique and performance in criminals. *J. Abn. & Soc. Psychol.*, 1929, 24, 91-103.—With respect to the intelligence of criminals, the present sampling is, like Murchison's group, superior to the general population, but the superiority is less marked. Approximately three-quarters of the population were convicted of burglary, robbery or larceny. A slight negative relation between robustness and intelligence is found (— .22) despite the fact that the two most intelligent criminal groups are the two most tending towards pyknic build. Interpretation of the results in terms of cyclothymic and schizothymic temperaments seems highly complex; at least, the data available are too meager to warrant conclusions.—C. H. Johnson (Boston Psychopathic Hospital).

738. Monroe, A. H. The effect of bodily action on voice intensity. *J. Appl. Psychol.*, 1929, 13, 516-532.—The investigation was carried out at Purdue University in two series of experiments. In the first series of experiments, 42 students were asked to produce simple vowel sounds, with and without simultaneous bodily action (a vigorous downward movement of the right arm), before a group of 131 auditors, who listened and recorded the relative loudness of sounds produced. The auditors themselves were previously given the Seashore intensity test to acquaint them with the procedure. Only those above the average in intensity judgment were retained as auditors. The subjects were students of both sexes of various degrees of training in public speaking. In the second series of experiments, a Sherrod and Keller apparatus was used to determine the effect of bodily action on breath pressure, which is in functional relationship to voice intensity. It was found that the effect of bodily action during vocalization was to increase breath pressure, although the effect was neither uniform nor universal, thus corroborating, on the whole, the conclusions drawn from the first series of experiments. The investigation,

to be more conclusive, according to the writer, will have to be more comprehensive, although the new method of approach may be considered sound.—D. L. Zyve (New York City).

739. Price, J. St. C. The intelligence of negro college freshmen. *School & Soc.*, 1929, 30, 749-754.—The author compares the intelligence-test performance of 867 negro freshmen from 7 of the first-rate negro colleges in the United States with the performance of 954 white freshmen from 6 representative white colleges. The median scores of the two groups on the Otis Self-Administering Test of Mental Ability differ by 10 points. Whereas the median IQ of the whites is 109, that of the negroes is 98. Only 20% of the latter, moreover, reach or exceed the median of the former. The whites show a variability only 66.7% as great as that of the negroes. 70 negro freshmen at Ohio State University and 42 other negro freshmen from 5 northern white universities show negligible differences in intelligence from the negro-college groups.—H. L. Koch (Texas).

740. Rice, S. A. Contagious bias in the interview; a methodological note. *Amer. J. Sociol.*, 1929, 35, 420-423.—An inquiry in which twelve investigators interviewed unselected series of applicants for charity disclosed a transfer of investigators' individual bias to applicants, and a corresponding distortion in replies given by the latter to scheduled questions.—(Courtesy *Amer. J. Sociol.*)

741. Riddell, W. B. "Thou shalt not suffer a witch to live." *J. Crim. Law & Crimin.*, 1929, 20, 355-359.—The story of Temperance Lloyd of Devonshire, who confessed to a compact with the devil and was hanged in 1682, is to be found in an old pamphlet: *A True and Impartial Relation of the Informations Against Three Witches, viz.: Temperance Lloyd, Mary Trembles and Susanna Edwards*—London, Printed by F. Collins. A briefer account is to be found in the classic pages of the *State Trials*: 20 How. St. Tr. 1017 sqq.—D. Katz (Princeton).

742. Seligman, C. G. Temperament, conflict and psychosis in a stone-age population. *Brit. J. Med. Psychol.*, 1929, 9, 187-202.—"The peoples referred to in this paper are the inhabitants of that part of Papua, or New Guinea, formerly known as British New Guinea but now officially entitled Papua, though actually constituting only about a quarter of the whole great island." They are referred to as "a stone-age population" because of the fact that at the time of observation they were neolithic and hence, according to the author, free from white influences. From observations made while among them the author concludes that these people are of an excitable and extrovert disposition; there is no evidence of mental derangement, other than brief outbursts of maniacal excitement, among natives who have not been associated with white civilization; insanity seems associated only with financial responsibility in connection with Europeans and with conflicts in the religious field.—M. B. Jensen (Michigan Central State Teachers College).

743. Smith, G. E. *Human history*. New York: Norton, 1929. Pp. xviii + 472. \$5.00.—This book is an attempt to answer the question: "What more

can the cooperation of biology and the humanities do to interpret human thought and action than is being done at present by the two disciplines independently?" Much evidence is introduced to show that man in the primitive state is decent, generous and peaceful, and that most of the evils of society are acquired with culture. The progress of civilization is shaped largely by accidents and catastrophes and by the force of dominating personalities, not through a succession of "evolutionary" changes.—M. P. Montgomery (Faribault, Minn.).

744. Starbuck, E. D. Religious psychology and research methods. *Rel. Educ.*, 1929, 24, 874-876.—Starbuck attended the Ninth International Congress of Psychology at New Haven early in September, and enumerates the paper presented at the session on religious psychology. Later in the month he was present at the conference of the Religious Education Association at Chicago. He has come to have a poor opinion of American scholars in their treatment of philosophical problems as compared with Europeans, but thinks the latter might profit by observing here the experimental methods of studying religion.—J. P. Hylan (Stoneham, Mass.).

745. Stok, W. Geheimnis, Lüge und Missverständniss. (Secrecy, lying and misunderstanding.) München: Duncker & Humblot, 1929. Pp. vi + 90. Rm. 4.—The social relation between two people may be disturbed in two ways: (1) A conceals some fact which concerns B (secrecy, reserve, taciturnity); (2) B does not accept some expressions of A's (refuses to acknowledge it, does not understand it, bars it). In both cases there is a break in the human contact (e.g., in conversation) which is often bridged over in other ways: (1) by hypocrisy, lying, shamming, dissimulation on A's part; (2) by misunderstanding on B's part. Following this morphological observation the author investigates the consequences of its appearance in social relations. Secrecy, lying, misunderstanding, etc., tend to spread. Once there is a secret, its keeper tends to conceal everything which might lead the other person to discover it. At the same time he makes use of lies (and further dissimulation) to cover up the secret. These also tend to expand. Now B becomes suspicious and therefore increases this tendency. Suspicion is favorable to misunderstanding, which also begins to flourish. But there is a tendency toward solution which counteracts these other tendencies (tendencies to unmask and confess). Any secret can only be understood as a reciprocal product. The author further investigates the influence of secrets, etc., on the social structure (relations of proximity and distance, conflict and peace, super- and sub-ordination). An estrangement of two people signifies some sort of separation from a mutual relation by dividing integrals into discrete elements. Friendship implies the reverse process. There are manifold relations (cause, symptom, result) between secrets, lies, obstruction, misunderstanding, and conflict, like super- and sub-ordination (bluffing, unmasking a person in order to humiliate him, a refusal of the weak leader to make cognizance of rebellion, etc.).—W. Stok (München).

746. Stratton, G. M. *Social psychology of international conduct*. New York: Appleton, 1929. Pp. x + 387. \$3.00.—The author reviews the problems of racial and national psychology as a background for the study of international behavior. He then discusses the various types of conduct of one nation toward another and points out that war is the result of social planning under the hypothesis that war is a ready and apparently easy solution to many of the problems held dear by the leaders. In the final section on the advancement of international conduct, the author emphasizes the need for education—education in tolerance and justice and in the need for institutions to promote these ends—and for “the unending study of the entire system of causes of international fear and ill will and war and of friendliness.”—W. S. Hunter (Clark).

747. Tomás, T. N. *Los atlas lingüísticos y las hablas populares*. (Linguistic atlases and popular dialects.) *Rev. de ped.*, 1929, 8, 481-486.—J. W. Nagge (Chicago).

748. Van der Leeuw, —. *Das Heilige und das Schöne*. (The sacred and the beautiful.) *Zsch. f. Religionspsychol.*, 1929, 2, 101-140.—The author here gives an outline of material which he plans to treat more thoroughly elsewhere. The following section headings indicate the development of his treatment: (1) unity of religion and art in the magic relation of meaning; (2) external connection in the half magic, half “modern” relation of meaning; (3) the conflict between religion and art—the antithetical structure; (4) the essential relation between religion and art. The author sees something conclusive in the classical appreciation of the sacred given by Otto. The final meaning which lies therein is the foundation of all human understanding. The characteristics of the sacred provide the points of view from which the author considers the beautiful. The metaphysics of the beautiful, like the metaphysics of the sacred, interests the phenomenologically inclined author only as an explanatory experiment. The beautiful “in itself” does not lie within the province of this work. Nature, however, may make a beautiful impression which we can in some circumstances change into a beautiful expression. Thus the beautiful, like the sacred, is accepted essentially as an experience. In the consideration of the relation between the sacred and the beautiful we cannot from a purely psychological point of view depend upon individual experience. We must examine the experiences of mankind and pass from the subjective to the objective point of view. Thus one approaches the problem of the relation between religion and art. Since the sacred has the characteristic of finality, there is no question from the viewpoint of phenomenological religion whether religion is a beautiful activity, a beautiful expression; but only the question, “Can art be a sacred activity?” The author does not treat the material chronologically from the history of religion, but according to its psychological structure. In the 4th section the author goes into the different forms in which the sacred appears to us in art, e.g., the lapidary, monotonous multiplicity, the sublime, the merely terrifying, archaic forms,

abrupt transition, the dark or half-dark, the inexpressible-everlasting, rhythmical movement, the human.—A. Römer (Leipzig).

749. Wells, F. L. *Musical symbolism*. *J. Abn. & Soc. Psychol.*, 1929, 24, 74-76.—The object was to gauge the extent to which a musical composition evoked associations denoted by the title assigned to the composition, or some other series of associations. Phonograph records of 10 musical compositions were selected for the symbolic nature of their titles and the likelihood that the particular group of hearers would be unacquainted with them. Considerable difference is shown in the symbolic values of the records, and generally emphasizes the subjective character of symbolism.—C. H. Johnson (Boston Psychopathic Hospital).

750. Witty, P. A., & Lehman, H. C. *Nervous instability and genius: poetry and fiction*. *J. Abn. & Soc. Psychol.*, 1929, 24, 77-90.—The article deals with examples of writers eminent in literary work where the nervous instability appears to have been an important factor in creating the drive of the subjects. The thwarting of certain strong desires often results in a redirection of energy and sometimes in conspicuous attainment.—C. H. Johnson (Boston Psychopathic Hospital).

751. Young, E. O. *The mind of a congregation*. *Rel. Educ.*, 1929, 24, 866-869.—Church attendants were asked to register their opinions on such questions as immigration, patriotism, war, etc. This test of international-mindedness was given to the congregations of a Unitarian and an Episcopal church and a Columbia graduate class.—J. P. Hylan (Stoneham, Mass.).

752. Young, P. V. *The Russian Molokan community in Los Angeles*. *Amer. J. Sociol.*, 1929, 35, 393-402.—The Russian Molokan colony in Los Angeles evidences many of the effects of cultural assimilation in spite of the resistance of the older members of the group to culture fusion. Changes in occupational level, geographic dispersion of the colony, education of the children in American public schools, activities of American social agencies, city missions, etc., are undermining the traditional control of the elders, the effectiveness of the family, of mutual aid mechanisms and the influence of Molokanism as a system of belief. The younger generation, after twenty-five years of American experience, displays much of the restlessness, disorganization, and social confusion characteristic of immigrant groups in which traditional controls have been only partially displaced by American urban ideals and habits. Present indications point to ultimate complete assimilation with probably decreasing disorganization in the future.—(Courtesy Amer. J. Sociol.)

[See also abstracts 458, 496, 513, 587, 953, 605, 620, 621, 625, 628, 638, 652, 673, 685, 689, 690, 696, 702, 712, 756, 769, 794, 797, 798, 805, 822, 874, 890, 898, 921, 923, 924.]

INDUSTRIAL AND PERSONNEL PROBLEMS

753. [Anon.] *Beroeps- en Beroepsvormingsproblemen voor meisjes*. (Vocations and vocational

problems for girls.) *Jeugd en Beroep*, 1929, 2, 335-358.—This article is a summary of an article appearing in an Austrian periodical by K. Leichter. The problem of vocational guidance for girls is an increasing and important one. From 1907 to 1925 the female population in Germany was increased by 15%, whereas the number of women workers was increased 35%. Women are changing their type of work since more and more are entering the industrial and administrative vocations. Lack of positions seems to necessitate this and it seems to be in accord with women's desires. The result has been a great increase in the number of unskilled laborers, and piece-workers result, who are always the first to be affected by a slump in industry or by a change in its methods. This, in turn, causes girls to move about a great deal and prevents them from "learning a trade." The author claims to have touched only a few phases of the problem, but makes these suggestions for improving the situation: increase the vocational possibilities for girls; provide further educational opportunities for unskilled laborers; get the girls into the proper branches of the trades unions.—*E. Winter* (Holland, Mich.).

754. [Anon.] *Leerlingopleiding bij de N. V. Grusonwerk (Fried. Krupp) te Magdeburg*. (Apprenticeship training at the Krupp works, Magdeburg.) *Jeugd en Beroep*, 1929, 2, 338-343.—The training at the factory school of the Krupp works is all based on the modern principle of education through practice, supplemented by theory. This type of instruction has been much developed in Germany and especially in Prussia. The government exercises and encourages general supervision over all these schools, and has set attendance requirements. The Krupp school has a four-year course. No tuition is charged. Materials are furnished at cost. Eight hours of class work are required each week besides one hour of gymnastics. The instruction is given during factory working hours. Pupils who receive pay for the factory work also receive pay for school periods. The article contains a list of subjects with the number of hours per week required in each. Some opportunity is provided for electives. Many students avail themselves of evening courses at other schools in the city. There are athletic clubs, field trips, orchestras, library facilities, etc., under the general supervision of the school.—*E. Winter* (Holland, Mich.).

755. [Anon.] *Leerlingenzorg en leerlingenbescherming der Oostenrijksche kamers van arbeid*. (Apprenticeship lack and apprenticeship need in Union labor in Austria.) *Jeugd en Beroep*, 1929, 2, 343-345.—Austria is beginning to feel a shortage of apprenticeship labor, due to the lower birth rate which prevailed during the days of the war. The writer thinks this might induce the trades unions to take measures to insure better working conditions and higher qualifications, but such is not the case. Due to remissness in government there have grown up 49 societies for the protection of youthful workers. The reports of these societies show that, although the number of apprenticeships have gradually decreased during the last few years, the number

of complaints coming to the societies has been about the same. In 1928 complaints to the number of 24,000 were brought to their attention, and 13,000 infractions of the law were recorded. Many cases showed that children of fourteen are still working 60, 70, and 80 hours a week. The departments of labor have rendered a valuable service and are committed to a worthy program. Thirteen items of this program are listed at the end of the article.—*E. Winter* (Holland, Mich.).

756. Beckman, R. O. *To what extent are vocations inherited?* *Voc. Guid. Mag.*, 1929, 8, 9-11.—The application forms of 750 persons who were qualified for city employment by the city of Cincinnati in 1928 were examined in regard to the occupation of the fathers of the applicants. Large percentages of the applicants were following occupations generally conceded to be of a superior type to those followed by their fathers.—*W. Dennis* (Virginia).

757. Brown, A. T. *Energizing personality*. New York: McGraw-Hill, 1929. Pp. xvi + 156. \$2.00.—Popularly written advice concerning self development and how to get a job, including a method of grading one's personality, brief analyses of some vocations, etc.—*E. B. Heim* (Price, Utah).

758. Cavan, R. S., & Cavan, J. T. *Education and the business girl*. *J. Educ. Sociol.*, 1929, 3, 83-93.—A study of Chicago young women office workers with reference to marital status, age, sex, salaries, intelligence, social background, education, interests, problems; attitudes toward work, further education, families, boy friends, future, etc.—(Courtesy *J. Educ. Res.*)

759. Elkind, H. B. *Industrial psychiatry*. *Rehab. Rev.*, 1929, 3, 151-161.—*R. R. Willoughby* (Clark).

760. Hansen-Tybjerg, C. *Differences in the talents and abilities of young people*. *J. Appl. Psychol.*, 1929, 13, 451-468.—Description of a series of tests for apprentice printers and compositors, evolved in cooperation with the Association of Master Printers of Copenhagen, Denmark. The tests include setting, laying out, reading, proof-reading, spelling, memory tests, setting up advertisements and titles, tests for color-blindness, adjustment test (judging relative clearness of a set of three impressions of a picture), test of practical mechanics, common sense questions, perspective drawing. In such tests as setting, laying out, etc., the quickest individual performed roughly twice as much work as the slowest. The description of each test is followed by a few data giving the distribution of scores; these were not treated statistically. Neither the reliability nor the validity of the tests was computed.—*D. L. Zyve* (New York City).

761. Morton, L. A. *Employment problems of the deafened*. *Voc. Guid. Mag.*, 1929, 8, 67-73.—The deafened are defined as those who learned to talk before they lost their hearing. There are about three million public school children in the United States who have incipient deafness. About four-fifths of these can be saved from becoming deafened adults by proper treatment in their youth. This pro-

vention is the best way of solving the employment problem. On the other hand, the incurable children and the deafened adults can adjust themselves if they can be made to face the facts and choose a vocation that they can enjoy and do well. The worst obstacle at present is the attitude of most employers, who do not understand the deafened or realize that for many positions hearing is not necessary and may even be detrimental. Clubs and special training in the schools have already been begun in some cities to give the deafened vocational guidance, training, and placement service.—*M. B. Mitchell* (Yale).

762. **Pear, T. H.** The human factor in industry. *J. Soc. Chemical Indus.*, 1929, 48, 227-231.—An address delivered before a group of chemical engineers. After a brief review of the aims of industrial psychology, the author stresses the need for more definiteness and discrimination in the use of terms in technopsychology. Taking as an example so widely and so vaguely used a term as "skill," he believes that the definition of this term as "an integration of well-adapted responses" ought to be differentiated from certain intellectual, moral or character traits, without which the definition becomes vague, if not meaningless. These traits cannot be detected by common sense alone. They require a careful study on the part of both the engineer and the psychologist. The cooperation of the two is, therefore, essential.—*D. L. Zylve* (New York City).

763. **Robert, A.** Recherches sur l'entraînement et l'éducabilité au point de vue professionnel. (Researches on training and educability from the professional point of view.) *Rev. de la sci. du travail*, 1929, 1, 233-256.—The author performed certain exact experiments on apprentices under industrial conditions. The tests consisted of psychomotor and mental activities resembling the factory work. The results revealed a diversity of individual types in the apprentice group. Four types were determined from the point of view of perfectibility: the superior type, which reached the greatest degree of perfection in the minimum of time for all the various kinds of work; the inferior type, which ordinarily manifested a measure of perfectibility without ever attaining an average degree of perfection and which became accustomed very slowly to change of work; the average type, the most widely distributed, which was distinguished from the superior type by a less rapid adaptation and educability rather than by the degree of final average perfection; and the mixed type, which generally began badly and finished well, often very well, but which did not like varied work.—*Math. H. Piéron* (Sorbonne).

764. **Van Det, E. J.** Roeping, beroep, broodwinning. II. (Calling, vocation, livelihood.) *Jugend en Beroep*, 1929, 2, 323-331.—In this article the writer tries to distinguish between "calling" and "vocation." He regards a calling more in the nature of a set purpose or ideal rather than actual work. A man enters a calling with a set purpose for service. Modern vocations do not permit of this ideal or purpose. Reference is made to the first article (see IV: 358) in which it was stated that a vocation can become a calling if one learns to recog-

nize the purpose or ideal that has been set up for his vocation as though it were his own. According to the writer, the great mass of people engaged in the varied tasks of modern industry have no conception of a calling in life. For this condition the people themselves are not entirely to blame. Many have entered the professions who have no consciousness of a calling, but there are many in the apparently "ideal-less" vocations who possess the intellectual, emotional, and other qualifications for following an ideal. It appears that there must be something wrong with the manner in which people enter their vocations. Statistics are given to substantiate this last statement. The writer closes with an illustration drawn from his own experience with youth.—*E. Winter* (Holland, Mich.).

[See also abstracts 579, 669, 670.]

CHILDHOOD AND ADOLESCENCE

765. **Aguirre, E.** El factor cinematográfico en la delincuencia infantil. (The part of motion pictures in juvenile delinquency.) *Bol. de Crim.*, 1929, 2, 245-254.—Motion pictures in which scenes of violence are portrayed may play a large part in the development of nervous disorders in children and consequently lie at the basis of much delinquency. The writer pleads for the exclusion of children from such entertainments.—*J. W. Nagge* (Chicago).

766. [Anon.] Books on child care. *Lancet*, 1929, 217, 52-53.—A discussion of a number of books on child feeding and management.—*W. T. Heron* (Minnesota).

767. **Bader, I. H., & Bücking, M.** Ein verzärteltes Kind. (An overindulged child.) *Int. Zsch. f. Individual-psychol.*, 1929, 4, 309-313.—Case I. A girl, 7 years old, was unable to meet other children socially at play or in school. Father, mother, and grandmother all spoiled her, while each contradicted the efforts of the other two. The child used as defense the simple expedient of appearing stupid. She learned to read well, but was hopelessly retarded in arithmetic, a condition which was ascribed by teachers and the school physician to a special inherent disability. Because of bad conduct and violent outbursts of temper the child was separated from the other children in school and on the playground. Under Miss Bader's treatment the child during the course of the year developed sufficient poise and ability to take her part in social activities in school and on the playground. Case II. A boy with a younger sister was overindulged by an unstable mother. He feared a quick-tempered father who finally deserted the family. Bücking shows how the child's insecurity in his own and in boarding homes drove him to various escapades. Some of these were bids for attention, some acts of revenge and defiance, some in the nature of threats. Through all his activity the sense of insecurity and the lack of confidence in people are clearly apparent. When, under the final treatment, his various predatory and anti-social activities were shown to have the opposite effect from what he wished to secure, they were automatically eliminated. Thus masturbating, violent temper, bed-wetting, sleep-walking, greediness and

selfishness have all gradually disappeared.—*O. N. de Weerd* (Beloit).

768. Bliss, E. H. Planning ahead for leisure time. *Child Stud.*, 1929, 7, 78-79.—In planning leisure for children, it should be remembered that there should be some time in which the child can "do the things that interest him deeply and for which he can plan himself, or do spontaneously what seems good to him; . . . some time should go to stimulating and deepening spiritual values." Suggestions are given on how to plan for leisure.—*M. Goodrie* (Clark).

769. Bose, B. G. Religious concepts of children. *Rel. Educ.*, 1929, 24, 831-837.—Since thinking is a factor in action, religious thinking is a factor also in determining conduct. 100 concepts such as God, church, Bible, were used with high school pupils in Southern California to discover what meanings children associated with them. It was found that a short stay in church school did as well as a longer one, and that there was but little evidence of growth after fifteen years of age. The present church school appears inadequate for religious development and does not fit children for religious experience.—*J. P. Hylan* (Stoneham, Mass.).

770. Bowman, L. E. The play world of the city child. *Child Stud.*, 1929, 7, 67-69.—"The great need is development of those agencies like nursery schools, country all-day schools and other progressive movements which can offer the child a chance through work and play . . . to build a world for himself."—*M. Goodrie* (Clark).

771. Bridges, K. M. B. The occupational interests and attention of four-year-old children. *J. Genet. Psychol.*, 1929, 36, 551-570.—14 four-year-old children were observed during their free play hour, when they chose any of the Montessori or other occupational sets of materials that they desired to play with and returned each before choosing something else. Records were made of the number of times each set was chosen and the total time it was used by each child; and similar records were made of distractions. Favorite occupational materials were those of colorful nature that presented obvious problems within the scope of the children's abilities and yet allowed opportunity for variation. Some sex differences were noted, as that boys remained at respective occupations longer but were more easily distracted.—*J. F. Dashiell* (North Carolina).

772. Burke, N. H. M., & Miller, E. Child mental hygiene—its history, methods and problems. *Brit. J. Med. Psychol.*, 1929, 9, 219-242.—A brief history of child mental hygiene in Europe and America with notes on the organization and conduct of a clinic under the direction of the Jewish Health Organization.—*M. B. Jensen* (Michigan Central State Teachers College).

773. Busemann, A. I. Geschwisterschaft und Schultüchtigkeit. II. Die Schultüchtigkeit nicht vollletriger Kinder. (I. Siblings and ability in school. II. The ability in school of children who do not have two parents in the home.) *Zsch. f. Kinderforsch.*, 1929, 35, 509-516; 517-531.—Both works are contributions to the knowledge of environment. In the first paper the author shows among other

things that in school children from the better social classes the "only" child is a full year behind children with one or more brothers or sisters, and the cause of the retardation is either being kept back or postponement of entering school on account of immaturity. In the second paper the author points out that children who do not have both parents in the home are behind those who do. Causes of this retardation may be inadequate care and surveillance, often also spoiling. Only the complete family is adapted to the needs of the child, that is, one which includes both parents as well as other children. Busemann demands that such children as show structural defects or are handicapped by the cultural retardation of their families be placed in restoration classes. They do not belong either in the auxiliary schools with children suffering from congenital defects or in the regular grades with children coming from a good environment. The author considers it self-evident that measures for taking care of such children are necessary.—*O. Seeling* (Berlin).

774. Butler, T. J. The psychological treatment of loss of appetite in children. *Penn. Med. J.*, 1929, 32, 608-609.—*R. R. Willoughby* (Clark).

775. Cooper, O. A. Habit clinics and their purpose. *Commonwealth*, 1929, 16, 47-48.—*R. R. Willoughby* (Clark).

776. Dietel, Fr. Das Bettnässen, seine Ursachen und Vorschläge zu seiner Behandlung. (Enuresis, its cause and methods of treatment.) München: Lehmann, 1929. Pp. 83. Rm. 4.50.—*R. R. Willoughby* (Clark).

777. Duffy, E. Tensions and emotional factors in reaction. *Genet. Psychol. Monog.*, 1930, 7, 1-79.—This is a contribution to the study of the "degree of excitability" of the individual. The subjects were children from 3½ to 5 years of age. Kymographic records are given showing the degree of tension of the muscles of the unused hand while the subject was using the other hand to press a key in a discriminatory reaction to red and white light. The tension was indicated by the pressure of a rubber bulb held in the unused hand during the performance. Records were made for each subject for 11 consecutive days. During the last four days stimuli intended to excite the subject were introduced. Marked individual differences were found, but these differences remained constant for each individual. A fairly high correlation was found between the degree of tension and the teachers' estimates of the tendency of the child to excitability. Type of tension line, namely height and shape of line, seems to be correlated with certain general reaction tendencies of the individual. It also discloses some of his temperamental characteristics, since height of tension line is correlated with a tendency to become excited. Also, regularity of line apparently correlates with tendencies in coordination, i.e., whether the individual is poorly or well coordinated. No trace is found of a definite relation between tension and degree of efficiency in performance. Résumés are appended in French and German. There is a bibliography of 11 titles.—*H. S. Clapp* (Children's Court, New York City).

778. Fagan, B. J. Safeguarding children's leisure. *Child Stud.*, 1929, 7, 69-71.—"Parents need not face the challenge of city life with fear. In spite of its many hazards and problems, the city does offer its children many alternatives that are both good fun and good for them."—M. Goodrie (Clark).

779. Paris, E. On the fundamental tendencies of children. *Rel. Educ.*, 1929, 24, 808-812.—It is natural for children to fit into any skillfully presented cultural pattern. In order for religious education to succeed it must compete with old motives and supplant them with better ones.—J. P. Hylan (Stoneham, Mass.).

780. Ferrière, A. Les types psychologiques dans l'enfance et dans l'espèce. (Psychological types in childhood and in the species.) *Hygiène ment.* [Supp. *Encéph.*], 1929, 24, 78-84.—The author postulates four dominant types: sensory, imitative, intuitive, and rational. He recalls that in the evolution of the species there is a series of phases constituting the history of civilization. First comes the presocial phase (very little social life, limited to the satisfaction of actual needs); second, the patriarchal family life and the tribe; third, the revolution of individualism against authority imposed from without; and, fourth, mutual responsibility and reflective liberty. This historical evolution recurs in childhood. The child up to six years is sensory-minded; from six to twelve he experiences the need of authority, of regulation, law, and obedience; from twelve to eighteen, on the contrary, he revolts against all authority; and from eighteen to twenty-four he experiences a spiritual renaissance which is organized in accord with reason and the social opinions of his group. An individual will, as an adult, belong to the sensory, conventional, intuitive, or rational type according to which of these characteristic types has become dominant in the course of his development.—Math. H. Piéron (Sorbonne).

781. Franklin, Z. C. Saturday and Sunday—assets or liabilities. *Child Stud.*, 1929, 7, 65-67.—Points out the need for meaning and purpose in the increased week-end leisure time of children.—M. Goodrie (Clark).

782. Fries, M. E. Probleme des Verhaltens bei Kinder unter drei Jahren. (Problems in behavior of children under three years of age.) *Int. Zsch. f. Individual-psychol.*, 1929, 4, 296-303.—Original appeared in *Archives of Pediatrics*, New York, November, 1928 (translated by Hanna Ullmann and Martha Holub). On a background of four illustrative case records the writer shows how necessary it is that the general practitioner and child specialist take full account of the possibilities of prophylactic mental hygiene as a part of the practice of preventive medicine. The cases showed various personality disturbances in infants, such as violent temper, urinary difficulties, dietary and developmental disturbances and masturbation. Treatment consisted of having the family change their attitudes toward the child and their method of training.—O. N. de Weerd (Beloit).

783. Fuller, M. P. Nine children's play activities. *Child Stud.*, 1929, 7, 74-76.—After recording observations of the play activities of 9 children, aged

6 to 9 years, during the summer months, the author found that, judged by adult standards, the children wasted time. "Children can probably be helped to utilize their leisure profitably by turning them loose with raw materials at an early age and continuing to do so."—M. Goodrie (Clark).

784. Furfey, P. H. You and your children. New York: Benziger, 1929. Pp. ix + 173. \$1.50.—The purpose is to "bring to the Catholic parent the best available knowledge on child training—a knowledge derived from the age-old experience of the Church and from some of the recent results of modern psychology." Some of the subjects are: a healthy mind, the spoiled child, discipline, religion and the pre-school child, etc.—E. B. Heim (Price, Utah).

785. Gesell, A. Infant behavior in relation to pediatrics. *Amer. J. Dis. Children*, 1929, 37, 1055-1075.—R. R. Willoughby (Clark).

786. Gundrum, L. K. Deafness and the child. *Calif. & Western Med.*, 1929 (August).—R. R. Willoughby (Clark).

787. Hauck, E. Zur differentiellen Psychologie des Industrie- und Landkinder. (The differential psychology of industrial and agricultural children.) Langensalza: Beltz, 1929. Pp. 65. M. 2.20.—This work is devoted to a consideration of the following three questions: (1) What are the quantitative and qualitative differences in intellectual achievement between urban and rural children? (2) What effect does bilingualism have upon intellectual performance? (3) What is the mental status of Upper Silesian children in comparison with those from central and South Germany? 406 twelve-year-old children were examined. They were selected from schools in typical Upper Silesian communities. The material was assembled by the experimenter in person, and was followed by a precise statistical treatment. Industrial children were slightly superior to agricultural ones; bilingualism exercises an inhibiting influence upon mental development. This last seems to be one of the reasons why the Upper Silesian child's ability does not equal that of the Middle German or South German child.—E. Hauck (Beuthen i. Oberschlesien).

788. Heid, H. The interpretation of mental tests. I. *Lancet*, 1929, 216, 1317-1318.—The author enumerates the familiar points with reference to the individual history of the case, such as the norms for walking, talking, doing simple acts of skill, control of excretory functions, etc. He also places great value on observation of the child. He has little use for the family history of the individual as an aid in diagnosis.—W. T. Heron (Minnesota).

789. Howes, E. P. Home—a project. *Child Stud.*, 1929, 7, 73-74.—If we can get our children "to think of home as an entity which the family can bring into being, make attractive and desirable for ourselves and our friends—and their friends—then each one can find within it scope and opportunity for his own talents and interests. Even humdrum tasks take on some drawing power, when it is a matter of home pride."—M. Goodrie (Clark).

790. Hutchins, M. R. Learning to play. *Child Stud.*, 1929, 7, 76-77.—The ethical culture schools

aim to give the child a "development through play activities, according to his age, capacity, interests and needs, that will result in a development of his powers of adjustment so that he will be able to meet situations 'on his own.'"—*M. Goodrie* (Clark).

791. *Lazarsfeld, P. Körperliche und geistige Entwicklung.* (Physical and mental development.) *Die Quelle*, 1929, 79, 803-809.—This investigation was carried on to settle a difference of opinion about the relation between mental and physical traits. 46 classes with 1,500 boys and 36 classes with 1,100 girls were chosen for study. The correlations were figured between mental and physical development by means of the Spearman rank-order formula. The resulting correlations ran for the eighth grade from .09 to .75 with an average of .41; for the sixth and seventh grades from .13 to .56, with an average of .25; and for the fourth and fifth grades, from .18 to .71, with an average of .18. For the corresponding girls' classes the averages were .32, .30, and .18. Taking from every class the 25% best and the 25% poorest, and computing again the correlations between intellectual and physical development of these selected groups, the author comes to the conclusion that there actually exists one group of children with high correlation between mental and physical development, and another with a distinct non-correlation. Both types are numerically equal after the age of eight years. The first group, however, is usually slightly larger, so that, in taking a random sample of children, the correlation will always be close to zero, and positive.—(Courtesy *J. Educ. Res.*)

792. *Leal, M. A. Physiological maturity in relation to certain characteristics of boys and girls.* Philadelphia: Univ. of Pennsylvania, 1929. Pp. 118.—This bulletin contains a study of physiological maturity in relation to certain characteristics of boys and girls, based on data secured in the New Britain, Conn., public schools, grades II-XII. The bulletin presents a summary of previous investigations, explains how boys and girls mature and progress through school stage by stage, and lists the personality traits characteristic of different stages of physiological maturity.—(Courtesy *J. Educ. Res.*)

793. *Lesemann, G. Alkohol und Hilfsschule.* (Alcohol and the auxiliary school.) *Hilfsschule*, 1929, 22, 449-481.—The author of this extensive paper has thrown light upon four problems: (1) alcohol and the achievement of special students; (2) alcohol and educational retardation; (3) duties of the special schools; (4) duties of faculties in special schools. Lesemann is of the opinion that in the last analysis the alcohol question is a matter of education. He offers incidentally a thoroughgoing critique of the "activity schools," which he rejects as the principal agency of school reform. This organization has only changed the processes of method, but has done nothing with content and aims. A genuine school reform is possible only in terms of the traditional system. The author arrives at the following conclusions: (1) Alcoholic indulgence by parents injures the child, particularly in the motor field; (2) parental alcoholism makes the children indolent and difficult to educate; (3) along with psychological and psychiatric

considerations, the practical work of the auxiliary school finds the sociological attitude indispensable; (4) parental education must not be neglected.—*O. Seeling* (Berlin).

794. *Luquet, G. H. L'évolution du dessin enfantin.* (The evolution of childish drawing.) *Bull. Soc. Binet*, 1929, 29, 145-163.—The author defines childish drawing as that of persons who have not yet learned to draw in an adult fashion. This drawing period has three stages. The first is the genesis of intentional design. The child begins by drawing characters from a tendency to imitate adults who are drawing or writing. He draws these characters without attributing to them any significance, until one day when he discovers an analogy between his drawing and what he is imagining. He then corrects his drawing in order to add to this resemblance. The second stage is unsuccessful realism. Having reached the point of intentional design, the child tries unsuccessfully to copy real objects. The third stage is intellectual realism. The child at last begins to realize plainly his realistic intentions and tries to draw not what looks like the model but what expresses his own interpretation. Then he finally begins to replace intellectual realism by visual realism. Usually, however, he fails and gives up trying to draw.—*Math. H. Piéron* (Sorbonne).

795. *Maller, J. W. Child psychology as applied to orthodontia.* *Int. J. Orthodont.*, 1929, 15, 585-589.—*R. R. Willoughby* (Clark).

796. *Mateer, F. Just normal children.* New York: Appleton, 1929. Pp. ix + 294. \$2.50.—A child may be "normal" and still present physical disturbances and behavior problems which prevent his reaching maximum efficiency. Parents should strive for their correction with the aid of (1) a health physician, (2) a psychologist, and (3) a psychiatrist. Illustrative cases which the author has handled represent difficulties of sleep, eating, laziness, backwardness, deliberateness, abnormal speech, lack of concentration, inability to learn, emotional problems, fear, lying, stealing, running away, inability to play with others, "family autoeracy," trouble making, acquiring sex information. In each case the method of diagnosis is explained, the treatment outlined, and the results of the treatment stated. Additional suggestions for each type of problem are given in the question-and-answer form.—*M. P. Montgomery* (Faribault, Minn.).

797. *McCarthy, D. A comparison of children's language in different situations and its relation to personality traits.* *J. Genet. Psychol.*, 1929, 36, 583-591.—The first fifty verbal responses made by nursery school children were noted in the presence (1) of an adult and (2) of other children; they were subjected to analysis by the functional classification of Piaget; and they were compared with ratings of extroversion-introversion on the Marston scale. The mean number of words per response was practically equal in the two situations, though differing widely with certain children (dependent upon a personality trait?). More ego-centric responses were made in situation (2), as were also more emotionally-toned ones. The ratings showed little correlation of ex-

troversion with length of responses made, with time to make responses, with ego-centric responses, or with other measures, especially in situation (1).—J. F. Dashiell (North Carolina).

798. McCarthy, D. The vocalizations of infants. *Psychol. Bull.*, 1929, 26, 625-651.—(A review of 92 references.) In the last few years there has been a falling off in biographical reports and an increasing number of studies on groups of children under controlled conditions. Some of the phenomena studied are: character of the birth-cry, differentiation or non-differentiation of early cries, variability and range of the early sounds, great individual differences, importance of imitation, understanding words heard antecedent to the producing of words, first words as reduplicated monosyllables. The recording of infant sounds presents great technical difficulties. The auditory methods (phonograph, dictaphone, telegraphophone) have more limitations than the graphic methods (manometric flame, diaphragm and lever, diaphragm and light beam, galvanometer and light beam); but none of the latter is satisfactory. There is the additional problem of obtaining a satisfactory phonetic notation.—J. F. Dashiell (North Carolina).

799. McGinnis, E. The acquisition and interference of motor habits in young children. *Genet. Psychol. Monog.*, 1929, 6, No. 3. Pp. 209-311.—In an experiment to test learning ability, the Young Slot Maze A was given to three groups of children at age levels of three, four, and five years. The sexes were evenly divided in each group. Each child had five trials a day, five days a week for two weeks, making fifty trials per child, and a total of 3,000 trials. 28 children completed the experiment. Reliability for the total group of 60 on trials 5-50 was $+.618 \pm .017$, S.E. Total time, and also errors, decreased with age. Decided sex differences in favor of the boys, noted at the initial trials, tended to disappear when learning was continued to 50 trials. Correlations with IQ were low both for time and errors. Individual differences, measured by gross gain, by percentage gain over initial trial, and by coefficient of variability, decreased with practice. In the elimination of errors, culs-de-sac nearest the goal were eliminated first, then those at the beginning and finally those in the middle. In each group, the left hand was used more frequently to start with. The older children tended to use the right hand more than the left and also to change hands during the test less frequently than the younger groups. The children who made the best time changed hands less often and tended to use one hand consistently. Picture mazes, to determine how far initial aptitude might be due to a pattern-seeing ability, were given to 36 of the total group. Results indicated a correlation between such an ability and aptitude, apparently partly independent of intelligence. Two groups from the original total were given ten consecutive trials in a relearning test. Both groups gained in the relearning in both time and errors. In a second experiment to test transfer and interference, two paired groups of twelve children each were used with four patterns on a maze in which the true path was blocked from below and the visual cues were similar. The first

group had forty trials each with two patterns, the second, fifty trials each with four patterns, making a total of 3,260 trials. The groups were matched in chronological age, mental age, IQ, sex, and in initial and last trials in the Young Slot Maze experiment. The reliability coefficients for trials 5-40 or 5-50, odd or even for each pattern, ranged from $+.3$ to $+.6$. The four patterns were equated for difficulty. The experiment showed marked transfer, measured by differences in total time and errors, from each pattern to the succeeding one, in spite of the fact that the patterns were designed to produce a maximum of interference. Temporary interference was shown between the last trial of one pattern and the first of the next, or between means of the last five and the first five. Correlation with test intelligence was 0, as was the correlation between the first trials on this maze and the Young Slot Maze. Fewer duplicate errors were made in trials on successive days than in consecutive trials on the same day. As in the previous experiment, the culs-de-sac nearest the goal were eliminated first, then those at the beginning. The average errors per child per trial decreased in each group as learning proceeded.—A. M. Chamberlayne (Worcester, Mass.).

800. Mohr, G. J., & Waterhouse, E. H. Enuresis in children. Observations on causation and treatment. *Amer. J. Dis. Child.*, 1929, 37, 1135-1145.—R. R. Willoughby (Clark).

801. Morales, E. G. [Plan of provincial organization for the selection and protection of abnormal children.] *Arch. Med. Cir. y Especialidades*, 1929 (August 17).—R. R. Willoughby (Clark).

802. Olson, W. C. The measurement of nervous habits in normal children. Minneapolis: Univ. of Minnesota Press, 1929. Pp. xii + 97. \$2.00.—Report of a study of the occurrence in approximately 700 normal children, ranging in age from two to fifteen years, of certain "nervous" habits such as thumb-sucking and nail-biting. The relationship of such habits to fatigue, imitation, nutritional status, habit formation, family history, age and sex is analyzed. The method of measuring used is that of "time sampling, the essence of which lies in the observation of the behavior of each individual in respect to the particular category of activity upon which information is to be obtained, during a period of time that is kept constant for each individual observed." An inventory of ties was drawn up on the basis of a review of the literature and a classification made on the basis of body part involved, e.g. oral, manual, facial. Oral habits were given the most intensive study. Some of the conclusions arrived at are: "1. There is no relationship between the amount of nervous habits and age. 2. The incidence . . . significantly greater in girls than in boys. 3. Members of a family will resemble each other more closely with respect to nervous habits than will persons selected at random. 4. Evidence is presented which suggests that association with persons of nervous habits will produce nervous habits. 5. Fatigue during the school day tends to aggravate the manifestations of nervous habits. 6. In general, the underweight child will have more nervous habits than the normal at all ages.

7. Experimentation with the rat indicates that superfluous movements may be developed in response to an irritating stimulus. These movements, which appear analogous to what are often called nervous habits, persist after the disappearance of the irritation." Some study was also made of the relationship of scores on various personality and motor tests to observational measures of oral habits. No marked relationships were discovered, but some rather consistent tendencies were. There was a correlation in the thirties between oral habits and dentist's measurement of mm. of overbite.—*D. Shakow* (Worcester State Hospital).

803. Reik, Th. Das Kind betet. (The child prays.) *Zsch. f. psychoanal. Päd.*, 1929, 3, 305-318.—Prayer distinguishes itself from the compulsion-neurosis defence mechanisms only through its social character. Expectation of evil and the desire to ward it off are the psychic situations out of which prayer arises.—*G. W. Hartmann* (Pennsylvania State).

804. Rosler, G. Kampfstellung einer Zweitgeborenen. (Antagonistic attitude of a second-oldest child.) *Int. Zsch. f. Individual-psychol.*, 1929, 4, 307-309.—Case record of a disturbed personality, a little girl whose older brother was given preference by a mother. The child developed marked deficiencies in school abilities, extreme jealousy, and stubbornness. When the competitive spirit between the two children was overcome and the mother ceased to show lack of confidence in the little girl, the latter's difficulties disappeared.—*O. N. de Weerd* (Beloit).

805. Rostohar, M. Studie z vyvoje psychologie, DII. I. (Studies in developmental psychology.) Brno: Opera Facult. Philosoph. Universit. Masarykian. Brunensis. Cisto 25, 1928. Pp. 1-118.—The first part deals with the status of developmental psychology; with the logical foundations of the concept of development, its causality and essence; and with the significance of the mechanistic and teleological viewpoints for the notion of psychic evolution. In order to study the process, the development of visual perception from kindergarten to university was tested. Numerous pencilled and colored figures were to be drawn from their mental presentations after lengthy exposures: the attempts were repeated until the drawings corresponded to the original. The rate of perceptual development is dependent upon the age and total psychic disposition of the child. Its excellence is determined not by the duration, but by the kind of impression employed. The number of necessary repetitions is dependent upon the general mental maturity of the child, as well as the complexity of the object. The greatest number of positive results were obtained at the third observation at ages ten to fifteen. Individuals are classified into cumulative, *Leitmotive*, and contour types according to their sketchings. A distinction must be made between a development in phases and one in stages. The regression of the presentation to one of its preceding levels was tested by repeating the drawing after an interval from one to eight weeks. The influence of finished structures upon incomplete ones was readily discernible.—*P. Ranschburg* (Budapest).

806. Simon, R. E. Week-ends to fit the family. *Child Stud.*, 1929, 7, 71-73.—Parents should help plan their children's leisure time just as they help plan their meals, sleep and exercise. Children can be influenced to spend week-ends which "allow time for study and reading, for creative work, for spiritual inspiration, for meetings at home with friends and family, for seeing something worth while outside the home, and for much sleep and fresh air."—*M. Goodrie* (Clark).

807. Wallon, H. Les causes psycho-physiologiques de l'inattention chez l'enfant. (The psycho-physiological causes of inattention in children.) *Bull. Soc. fr. de péd.*, 1929, No. 32, 8-15.—The author does not use the word attention, since he considers it ambiguous, connoting two very dissimilar groups of facts. Sometimes it means the actual content of thought, including the whole of the presentations simultaneously appearing in consciousness (the Wundtian apperception); and sometimes it means the act itself and its dynamic conditions, as Wundt uses the term attention. The author prefers to study inattention, which he considers a generic term designating the different forms of activity into which the act of attention can be analyzed, and which constitute the concrete and positive experiences of the educator. Nearly all the causes leading to inattention are correlated with motor disorders.—*Math. H. Piéron* (Sorbonne).

808. Washburn, R. W. A study of the smiling and laughing of infants in the first year of life. *Genet. Psychol. Monog.*, 1929, 6, 403-537.—The subject has been approached from a developmental point of view. 15 children (9 girls, 6 boys) were observed at four-week intervals during the first year of life, the number of observations per child ranging from 4 to 8, and the number of children observed at each age level from 4 to 10. Behavior items mentioned by students of laughter and smiling in adults, and by observers of the behavior of infants (Shinn, Preyer, etc.) enabled the investigator to plan a controlled situation in which stimulation of laughter and smiling could be carried out. Laughter was found to occur later chronologically than smiling; it was more stereotyped in its form throughout the year. At the age levels of 12, 20, and 52 weeks, differentiating facial and bodily movements connected with smiling were observed. Individual differences had to do with frequency of laughing and smiling behavior rather than with its form. Methods of stimulation which elicited smiles also elicited laughter; the methods which were laughter-producing at the greatest number of age-levels were also laughter-producing in the greatest number of individuals. Following its appearance, the incidence of smiling and laughing is not a correlate of chronological age, relative rate of mental development, nor physical condition as evidenced by the weight-height index. Smiling seems to be much more a learned or conditioned response as the child nears the age of one year, and seems to be a communicative, adaptive response, while laughing seems to be a more primitive form of behavior, expressive of affective states. No relationship was demonstrated between physical type and type of expressive behavior. The fact that the subjects' type

of expressive behavior did not vary from observation to observation made possible a classification of the children on the basis of overt expressive behavior as: *ambi-expressive* (both laughter and crying being characteristic responses, some children showing very little of either—*parvi-expressive*—and some showing a great deal of both—*multi-expressive*), *risor-expressive* (much laughing or smiling, with a minimum of crying), or *depressor-expressive* (much crying and sober behavior, little smiling or laughing).—D. W. Jensen (Michigan Central State Teachers College).

809. Weiss, A. P. The measurement of infant behavior. *Psychol. Rev.*, 1929, 36, 453-471.—Social stimulation makes the study of the behavior of the human infant different from that of a study of animal behavior, where it is not found. Opinions differ as to when infancy begins and ends. The first two weeks might be called the period of the new-born infant. The problems studied at Ohio State are formulated in an effort to determine what the biophysical and biosocial stimuli are and how to control them. Special apparatus, controls and methods of investigating infant behavior are described. A number of other topics receive short mention, among them the hunger reaction, the development of skill, Köhler's theory of behavior, and the hypothesis of a biosocial component in infant behavior.—H. Helson (Bryn Mawr).

810. Weiss, G. Ein Arbeitsversuch an Fürsorgezöglingen. (An investigation of the work of custodial pupils.) *Zsch. f. Kinderforsch.*, 1929, 36, 83-127.—The author has made detailed and comprehensive investigations, mainly upon pupils in the state training school in Stadtroda in Thuringia. The study extended from January, 1926, to July, 1927. The object of the investigation was to answer the question whether there are typical differences of behavior patterns between normal and custodial children in the expression of the emotional and volitional life. The author has divided her work as follows: description of the children, general remarks on the experimental part, punching experiment (experiment involving monotonous work, namely punching holes in cardboard with printed dots). The experiment showed that there are children with uniform work periods, and then some with two or even three work periods. Moreover it was shown that many children remained at their work only from 2 to 4 minutes and then gave it up finally. Along with these a type was identified which stayed at the work for the required time. A third type had two work periods without revealing their full strength, doing as much in the second period as in the first, or even more. The fourth type included those children who did their real work in the second period. Children of very bad temper belonged to types I and III. To group II belonged the children without serious educational difficulties. The children in group IV were mostly those who had been exposed to danger sexually.—O. Seeling (Berlin).

811. Wheeler, L. R. A comparative study of the physical growth of dull children. *J. Educ. Res.*, 1929, 20, 273-282.—Data are from the Harvard Growth Study in which mental and physical meas-

urements were made of the same children at 12-month intervals by specially trained investigators. A total of 273 children are considered in the present study with an average IQ of 82.9 and with a range of 51-90. The physical norms used are those of Lashaw. For both boys and girls, the author finds that the dull children are below the norms for all measures of physical growth used, namely, standing height, sternal height, sitting height, leg length, trunk length, weight and iliac width.—S. W. Fernberger (Pennsylvania).

812. Zilahi, A. Zur Erziehung des Säuglings. (The training of the babe in arms.) *Int. Zsch. f. Individual-psychol.*, 1929, 4, 287-296.—A detailed case record of an infant's progress in mental behavior and physical development. The case exemplifies the application of Adler's fundamental principle, —make the child as self-dependent as possible. The writer attributes the successful development of the child's cheerful and self-dependent disposition to the careful observation of certain fundamental principles: constant supervision with least possible interference; maintenance of quiet and peace; avoidance of playing with the child, the giving of attention not really required, and of such toys as rattles; clothing that permits freedom of movement; development of desirable traits through the setting of useful goals; undesirable traits are shown to become fixed by calling attention to them through unnecessary interference; going to sleep without manipulation by an adult.—O. N. de Weerd (Beloit).

[See also abstracts 574, 590, 607, 663, 695, 712, 758, 850, 864, 898.]

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813. Acheson, E. L. The construction of junior church school curricula. New York: Teachers College, Columbia Univ., 1929. Pp. viii + 185.—R. R. Willoughby (Clark).

814. Allport, G. W. The study of personality by the intuitive method. An experiment in teaching from *The Locomotive God*. *J. Abn. & Soc. Psychol.*, 1929, 24, 14-27.—If psychology is to remain faithful to its natural subject matter (human nature) it must consider the individual manifestations of the single personality as well as general laws of human behavior. A concrete personality presents problems of causation and interpretation. Though not always sharply separable in practice, the first of these problems requires the current "explanatory" technique, the latter an "intuition" which focuses upon the unities of its subject. Any satisfactory theory as to "how we know people" must recognize that inference and context are always in the service of the inherent tendency of mind to elaborate its content into wholes, and therefore, in a sense, to perceive intuitively.—C. H. Johnson (Boston Psychopathic Hospital).

815. Baker, H. J. Educational disability and case studies in remedial teaching. Bloomington: Public School Publ. Co., 1929. Pp. x + 172. \$2.00.—This study is concerned with nine-year-old children from seven elementary schools in Detroit. Sixty of

them, whose marks in the "fundamental" school subjects (arithmetic, reading, spelling, handwriting) were either conditioned or failing, were chosen for special coaching in the subjects in which they were doing unsatisfactory work. This coaching consisted in two half-hour periods weekly spent with a special coaching teacher (two or three children reporting at the same time). Remedial work was done with the phases of the school subject in which the child seemed most deficient. The coaching, which was carried on for one semester, brought about very satisfactory results in some cases, but seemed to produce very little change in other cases (particularly with children showing reading defects). Personality difficulties were shown by case studies and diagnoses to be as important as mental and educational deficiencies in many of the children. Case studies of 40 of the 60 children illustrate the importance of careful case study and diagnosis of all children who are doing unsatisfactory school work. It is suggested that coaching over a longer period than one semester is necessary if the more serious defects are to be remedied.—*D. W. Jensen* (Michigan Central State Teachers College).

816. **Barnes, E. J., & Pressey, S. L.** The reliability and validity of oral examinations. *School & Soc.*, 1929, 30, 719-722.—"The paper reports an attempt to obtain some experimental evidence regarding the reliability and validity of oral examinations. The general procedure consisted in having six graduate students each examined by three different committees (also of graduate students) on the general content of a graduate course. Comparisons were then made between ratings of these candidates by different committeemen and different committees, and the ratings related to final marks in the course. All these relationships were decidedly low. The importance of a scientific experimental attack upon problems of higher education is emphasized."—*H. L. Koch* (Texas).

817. **Baxter, T.** Some techniques and principles used in selecting and teaching a unit of work. *Teach. Coll. Rec.*, 1929, 31, 148-160.—A description of the selection and teaching of a unit of work; "by a unit we mean the various experiences and activities of a grade which center around some one interest," e.g., "The History of Water Transportation," to a fifth grade class of 23 pupils, median IQ 115, median age normal, of the Lincoln School.—*J. M. Stalnaker* (Purdue).

818. **Bayles, E. E.** Testing for comprehension. *J. Educ. Res.*, 1929, 20, 268-272.—The author suggests a comprehension test to determine whether the student is able to employ some rule or law which he is able to give correctly. Examples for the Mendelian law in biology are given. This is merely a program for work.—*S. W. Fernberger* (Pennsylvania).

819. **Bedford, J. H.** A study of vocational interests of California high school students based on a survey of twelve rural high schools. *Calif. Quar. Secondary Educ.*, 1929, 5, 47-66.—The author concludes from this study of 12 rural high schools that the vocational interests of rural high school students

bear no relation to the vocational opportunities which are open to them. Nearly 90% of rural high school students have made a definite choice of vocation. Only a little over half of these, however, know the training requirements for the vocation chosen. No justification could be found for the excessively large proportion of students choosing the professions, and for the very small percentage of students choosing industry and agriculture.—(Courtesy *J. Educ. Res.*)

820. **Blonsky, P. P.** Die faulen Schüler. (Lazy pupils.) *Zsch. f. Kinderforsch.*, 1929, 36, 1-16.—The author examined all the lazy pupils in a large school in Moscow. Their ages ranged from eight to sixteen. 132 lazy boys and 28 lazy girls were obtained from 42 classes with a total of 1361 children. 4.1% of all girls were lazy as compared with 19.3% of the boys. 11.8% of all pupils, irrespective of sex, were lazy. According to the medical examination, the lazy children were by no means ill, but thoroughly healthy, energetic youngsters. 80% of the lazy ones denied their indolence. The author considers motor hunger as the cause of laziness in boys. This is decidedly less with girls, which accounts for the smaller percentage of laziness among them. An attempt is made to distinguish three distinct types of lazy students.—*O. Seeling* (Berlin).

821. **Bowden, A. O.** The qualifications of the teachers of New Mexico. *School & Soc.*, 1929, 30, 818-824.—The author presents a brief summary of the professional training and teaching experience of the teachers of the State of Oklahoma. Conspicuous is his lament that of the teachers' psycho-social and physical qualifications he knows little, as we have few well-founded ideas in regard to what traits in these categories are desirable.—*H. L. Koch* (Texas).

822. **Brown, K. I.** The problem of worship among college students. *Rel. Educ.*, 1929, 24, 843-848.—At Stephens College, vesper services are conducted on Sunday and Wednesday evenings. While music always plays a large part in these, the dominant theme is sometimes a talk, liturgical responses, a biographical sketch, a parable, a dramatic presentation, rhythmical movements, a literary selection, or a musical program. Care is taken to make the hour a religious experience which shall cultivate a habit of worship, rather than a mere pleasant spectacle.—*J. P. Hyman* (Stoneham, Mass.).

823. **Brownell, W. A.** Remedial cases in arithmetic. *Peabody J. Educ.*, 1929, 7, 100-107.—The results secured from six weeks individual instruction, based upon a careful diagnosis of pupil difficulties and upon a teaching technique which dealt directly with the difficulties involved, produced striking gains.—(Courtesy *J. Educ. Res.*)

824. **Carnicer, F.** Disciplina escolar. (School discipline.) *Rev. de ped.*, 1929, 8, 489-494.—The author discusses the general topic of school discipline. What is the cause of disobedience on the part of the student? It is to be explained in one of two ways: either we do not know how to direct him, or we have not taught him to obey. The causes of disobedience lie outside the pupil, not in him. A discussion of the merits and shortcomings of various forms of punishment, and a consideration of the

values of prizes, are contained.—*J. W. Nagge* (Chicago).

825. Charles, J. W. An experiment in teaching reading. *J. Genet. Psychol.*, 1929, 36, 591-594.—A boy of 125 IQ was taught between his second and third birthdays to recognize printed words and phrases that had accompanied the spoken words and phrases, and originally pictures.—*J. F. Dashiell* (North Carolina).

826. Chase, V. E. The diagnosis and treatment of some common difficulties in solving arithmetic problems. *J. Educ. Res.*, 1929, 20, 335-342.—Results of a study of 54 cases of pupils in the Fordson junior high schools who were having difficulty with arithmetic. The IQ's of the group ranged from 84 to 118. 17 cases were selected from this group for study. A complete case history was made for each case and then the subject was asked to solve certain arithmetic problems aloud before the examiner: a complete stenographic report was taken. A case record is analyzed. A number of specific bases for failure are given, but the author concludes that the main cause of failure is insufficient mastery of the fundamentals. The author finds that marked improvement may be obtained by proper corrective treatment based upon such a systematic study and analysis of individual difficulties.—*S. W. Fernberger* (Pennsylvania).

827. Choydleur, F. D. The relative reliability of the old and new type modern language examinations. *French Rev.*, 1929, 2 (May). Pp. 22.—After reviewing the experimental work relative to the reliability of old and new type examinations, the author presents the results of a comparison of new type and old type examinations at the University of Wisconsin. From the data presented, the author concludes that the new type examination is superior, but finds a very satisfactory reliability for the old type of examination as given at the University of Wisconsin. The reliabilities of the old type examinations for the students that took the new type in the first, second, third, and fourth semesters were .86, .87 and .88 respectively. The corresponding r 's for the new type test were .91, .96 and .94.—(Courtesy *J. Educ. Res.*)

828. Clark, M. G. An experiment in character training. *Rel. Educ.*, 1929, 24, 819-821.—There is at present no procedure guaranteeing certain character results. A plan of study is here presented having this end in view.—*J. P. Hylan* (Stoneham, Mass.).

829. Clem, O. M., & Walklet, J. K. Comparative school marks of September and January junior high-school entrants. *J. Educ. Res.*, 1929, 20, 360-366.—Investigation at a high school in Syracuse. Over a five-year period, the study considers 188 cases. Marks for English, Latin, biology and algebra are compared, both teachers' marks and examination grades. Neither group seems to be superior for any of the four subjects.—*S. W. Fernberger* (Pennsylvania).

830. Cowley, E. B. The vocabulary of plane geometry. *J. Educ. Res.*, 1929, 20, 392-394.—Study of the College Entrance Examination Board Sylla-

bus, the report of the Committee on the Reorganization of Mathematics in Secondary Education and the syllabus issued by the University of the State of New York Press. These are analyzed both for lists of words and for words of zero index. A number of words are found in a recent test which do not occur in any of the three sources. "It is plainly evident that the makers of standardized tests that are widely used have it within their power to retard or to accelerate the movement to lighten the vocabulary load in plane geometry."—*S. W. Fernberger* (Pennsylvania).

831. Crapullo, G. A. Factors influencing high school students in choice of vocation. *Voc. Guid. Mag.*, 1929, 8, 51.—A questionnaire was sent to pupils in one city and one country high school, inquiring about their choice of vocation, factors influencing their choice, preparation necessary, and duties involved in its practice. The answers showed almost complete ignorance of the preparation necessary and the duties. Advice and guidance by parents and friends were of small influence, according to the answers. Courses in vocational study and counselors for interviewing pupils and helping them make a choice on the basis of service are recommended.—*M. B. Mitchell* (Yale).

832. Culbert, J. F. The visiting teacher at work. New York: Commonwealth Fund, 1929. Pp. xv + 235. \$1.50.—This is a handbook for visiting teachers based upon the material gathered from thirty three-year demonstrations conducted by the National Committee on Visiting Teachers. The book is divided into two parts: the first treats of the work with the child and the second with the professional standards and relationships. The latter part is also of special interest to supervisors, principals, and superintendents. Concrete examples are given of various types of problems referred to the visiting teacher, and the manner in which they are adjusted. The appendices provide samples of the records, reports and forms used. Bibliography and suggested reading list for visiting teachers.—*M. B. Mitchell* (Yale).

833. Curtis, F. D., & Woods, G. G. A study of the relative teaching values of four common practices in correcting examination papers. *School Rev.*, 1929, 37, 615-623.—A study of the relative effectiveness of the four methods of correcting examination papers. The method of correction which requires the least of the teacher's time and energy, that under which the pupils check the incorrect items on their own papers during a discussion of the test items, is the most profitable of the four methods. The other three methods involve corrections by the teacher in one way or another.—(Courtesy *J. Educ. Res.*)

834. Danielson, C. L. A study of the effect of a definite course of reading in general literature upon achievement in content subjects with children of superior mental ability. *J. Educ. Psychol.*, 1929, 20, 610-621.—The influence of a definitely planned course of reading upon the Stanford Achievement scores (particularly Tests 6 and 7) of four groups of children of IQ 125 and above was studied. Stanford-Binet and Stanford Achievement Tests were

given to each pupil at the time he was selected for the special reading course. The achievement tests were repeated after intervals of one-half year, one year, a year and a half, and two years, a different interval being used with each group. It is concluded that the course of study and methods in current use in elementary schools do not produce in children of superior mental ability the achievement of which they are capable and that a higher level of achievement is reached by means of more varied and extensive reading of interesting material, if some use is made of the material read. Improvement is gradual and, among the children studied, does not seem to depend upon degree of intelligence. It is unsafe to assume that gain in the acquisition of information is adequately measured by the Stanford Achievement Tests.—*J. A. McGeech* (Arkansas).

835. Deputy, E. C. Knowledge of success as a motivating influence in college work. *J. Educ. Res.*, 1929, 20, 327-334.—An investigation of the effect of frequent knowledge of success upon the grades of three groups in freshman philosophy in a state university (not named). There were 35 students in each of the three sections. The students were given the Otis Self-Administering Test of Mental Ability. One section reviewed the work of the preceding session orally and served as control group; one group had a 10-minute written test at each session, and the other group had a similar 20-minute written test. The author finds that the grades were significantly increased when written exercises to measure the students' success were given each time the class met, provided the attitude on the part of the students toward the work was favorable.—*S. W. Fernberger* (Pennsylvania).

836. Dexter, E. S. Intelligence-test score and major subject. *School & Soc.*, 1929, 30, 779-780.—The investigation, carried on among the upper classmen in 4 representative American colleges, had as its problem the discovery of the relation, if such exists, between students' scores on an intelligence test and their major subjects. The author concludes that "there seems to be a considerable degree of variation among colleges as to subjects attracting the brightest students." There is apparent, moreover, no consistent and conspicuous advantage in favor of any one subject when the results are considered as a whole.—*H. L. Koch* (Texas).

837. Distad, H. W., & Davis, E. M. A comparison of column-dictation and sentence-dictation spelling with respect to acquisition of meaning of words. *J. Educ. Res.*, 1929, 20, 352-359.—The present study is an effort to decide whether pupils know the meanings of words tested in context better than they do those tested in column form. The words were selected by determining the difficulty of 214 words by a multiple choice procedure given to over 700 pupils. The words chosen were then taught over a period of several weeks and 80 words were chosen for the final tests. The directions are given in full. The results show the superiority of sentence over column dictation.—*S. W. Fernberger* (Pennsylvania).

838. Döring, W. O. *Pädagogische Psychologie*. (Educational psychology.) Osterwieck am Harz:

Zickfeldt, 1929.—The author attempts to present educational psychology as a whole from the point of view of modern science. The psychology of the pupil, the teacher and the class is regarded as a unit and developed in its totality. This point of view, which is embodied especially in personalism, is a combination of humanistic psychology with that of natural science. It enables us to approach from the point of view of psychology certain important educational problems. The author discusses in succession: (1) the total personality of the child (the essence of the child's personality, the child and its world, the mental life, mental development); (2) the dispositions of the child (dispositions in general, classification of the dispositions, individual dispositions such as temperament, character, intelligence, imagination, memory, eidetic endowment, suggestibility, sexuality, fatigue and learning ability); (3) the mental phenomena (perception, cognition, feeling); (4) the mental acts (acts of will, of attention, imagination, reflection and juvenile evaluation); (5) psychology of the class-room (general statements, organization and leadership, morale); (6) psychology of the teacher (general statements, the observing and judging attitude, the instructive behavior, the educational behavior, types of teachers, the natural teacher). This book is designed to give the teacher the psychological foundation for his own work, the general psychological foundation of modern educational methods (group teaching, practical instruction, etc.), the psychological justification of the more recent school organizations (elementary school, community schools, etc.), the utilization of psychological tools for practical measures (selection of pupils, intelligence testing, vocational guidance, etc.), a psychological attitude toward sex problems and the problem of will-education (the psychology of punishment), and an introduction into the methodology of modern psychology.—*W. O. Döring* (Lübeck).

839. Douglas, J., & Lawson, J. W. Measurement of reading skills in ability groups. *J. Appl. Psychol.*, 1929, 13, 494-498.—A battery of three reading tests was given to three groups (retarded, average, and accelerated) of children in grade 7A in a junior high school. The battery consisted of the Haggerty Reading Examination, Sigma 3, the Monroe Standardized Silent Reading Test (revised), and the Sangren-Woody Reading Test. Neither the Haggerty nor the Monroe test was found suitable for retarded children. The Sangren-Woody test alone was found equally suitable for advanced, average, and retarded children.—*D. L. Zyve* (New York City).

840. Elwell, F. H., & Fowlkes, J. G. *Elwell-Fowlkes bookkeeping test*. Yonkers-on-Hudson: World Book, 1929.—The test is designed to assist the teacher in assigning grades in bookkeeping, in determining a standard for admission to classes, in adjusting teaching emphasis on the various topics of the bookkeeping course, and for purposes of vocational and educational guidance.—(Courtesy *J. Educ. Res.*)

841. Estabrooks, G. H. Vocational guidance at Colgate University. *Voc. Guid. Mag.*, 1929, 8, 76-78.—Upon entering, the freshmen are given a series

of tests. Those with lowest grades on the psychological tests and highest on the psycho-neurotic scores are called in first for interviews. All students are supervised more or less by personal interviews and by letter. The director keeps in contact with the alumni and large business cooperations which can place the students as they graduate. He is assisted by juniors and seniors taking his courses in abnormal psychology and vocational guidance.—*M. B. Mitchell* (Yale).

842 **Fahmy, M.** *Lettrés et illettrés.* (The literate and the illiterate.) *Pour l'ère nouvelle*, 1929, 8, 185-188.—The author made some researches in Egypt on the influence of schooling on certain mental qualities. He gave four tests to children of the same age and social condition, some of whom were in school and some of whom had never been to school. The tests were the Porteus maze, a design test, a disc test, and stippling a square, the last two appealing to motor activity and attention. The conclusion is drawn that the school creates in the child certain dispositions towards mechanics that were not found in the unschooled child.—*Math. H. Piéron* (Sorbonne).

843 **Frasier, C. M.** *Intelligence as a factor in determining student teaching success.* *Educ. Admin. & Supervision*, 1929, 15, 623-629.—The author concludes that intelligence as measured by standard intelligence tests is not an important factor in determining success in student teaching. Low correlation is attributed to the fact that those with less intelligence than is necessary for teaching success have already been weeded out in high school and that success in student teaching depends upon other factors than intelligence.—(Courtesy *J. Educ. Res.*)

844 **Gardner, G. E., & Pierce, H. D.** *The inferiority feelings of college students.* *J. Abn. & Soc. Psychol.*, 1929, 24, 8-13.—The college mental hygienist, through his courses of instruction, ought to forestall the unfavorable, or even disastrous effects of excessive self-depreciation of college men and women. At least, the instructor may make evident to the students the subsequent antagonisms, breaking of discipline, and day-dreaming that obviously have their source in college. The knowledge of these trends of the mind would act as a preventative. Likewise the hygienist, through a perusal of the life histories submitted by his students, can locate and aid those individuals whose loss of achievement-recognition is carrying them into pathological compensations.—*C. H. Johnson* (Boston Psychopathic Hospital).

845 **Gilkey, R.** *The relation of success in certain subjects in high school to success in the same subjects in college.* *School Rev.*, 1929, 37, 576-588.—The author summarizes briefly the results of previous investigations and then presents the results from his own investigation, which is based on a study of the high school and college records of students who graduated from the New York State College for Teachers in 1921, 1922, and 1923.—(Courtesy *J. Educ. Res.*)

846 **Guller, W. S.** *Improving computational ability.* *Elem. School J.*, 1929, 30, 111-116.—This

article reports the results of a remedial program in computation. The types of errors in addition, subtraction, multiplication, and division made by 10 seventh-grade pupils are presented with a discussion of the remedial program pursued.—(Courtesy *J. Educ. Res.*)

847 **Hartshorne, H.** *A few principles of character education.* *Rel. Educ.*, 1929, 24, 813-815.—In attempting to rebuild a child's character, one should first discover the reasons and motives for his present conduct. In demanding changes of conduct, the demands should be graduated in accordance with ability. The dynamic force of new ideas should be employed, also associations with older people in their maturer interests.—*J. P. Hylan* (Stoneham, Mass.).

848 **Hawkes, E. W., & Johns, R. L.** *Orientation for college freshmen.* New York: Ronald Press, 1929. Pp. viii + 310. \$3.00.—This book is planned as a text for orientation courses for college and university freshmen. The fourteen chapters of Part I deal with the orientation of the student to college, including such topics as objectives of college education, activities of college students, what constitutes college success, factors involved in efficient study, psychological factors involved in study, the use of the library, note-taking, etc. The thirteen chapters of Part II deal with the orientation of the student to his life aim, and include discussion of the factors involved in vocational choice, heredity and environment, personality and character, the relation of college studies to vocations, and the adjustment of the individual to his life aim. In this section several groups of occupations (legalistic, commercial, transportation, trades and manufacturing, personal service and public protection, etc.) are discussed in some detail, with special reference to the opportunities available in these fields. Laboratory work in analysis of the student's own abilities and needs, and of specific types of occupations, is provided for. Exercises and extensive selected bibliographies accompany each chapter. Many questions for class discussion and individual consideration are raised in the textbook discussion.—*M. B. Jensen* (Michigan Central State Teachers College).

849 **Herriott, M. E.** *One measure of outcomes of instruction in the technique of teaching.* *Educ. Admin. & Supervision*, 1929, 15, 514-518.—The author attempts to measure the change in attitude produced by a course in the technique of teaching and concludes that such courses are valuable and that they produce products not ordinarily measured by conventional tests, either of the essay or informal objective type.—(Courtesy *J. Educ. Res.*)

850 **Heuyer, G., & Serin, M.** *Dépistage des anormaux psychiques dans une école de la ville de Paris.* (The investigation of cases of abnormality in a Paris school.) *Hygiène ment.*, 1929, 24, 175-184.—A psychologist, a psychiatrist, and two instructors collaborated in the testing. The Binet-Simon tests were used, the investigation concerning 261 children of a communal school.—*Math. H. Piéron* (Sorbonne).

851 **Hunt, E. R.** *The present status of vocational guidance in secondary schools of the state of Washington.* *Voc. Guid. Mag.*, 1929, 8, 3-6.—The status is determined by a questionnaire which was

returned by 55.1% of the schools.—*W. Dennis* (Virginia).

852. Jersild, A. T. Examination as an aid to learning. *J. Educ. Psychol.*, 1929, 20, 602-609.—In five different experiments subjects were examined on materials entirely new to them (course material, reading, essays, biography), and then re-examined after a period of study. Equivalent control groups were not pre-examined. Pre-examination with true-false tests yielded insignificant advantages for the pre-examination method. The true-false test has the disadvantages of strengthening wrong responses as much as right ones and of making insufficient demands on the industry of the learner. Pre-examination with multiple-choice and essay questions resulted in consistently higher scores for the pre-examined groups. Such questions avoid the difficulties of the true-false tests. It is concluded that an examination serves to aid learning in so far as it stimulates the industry of the learner.—*J. A. McGeoch* (Arkansas).

853. Jette, E. R., Powers, S. R., & Wood, B. D. Columbia Research Bureau chemistry test. *Yonkers: World Book*, 1929.—In three parts: (1) information (definitions, properties of substances, etc.), covering 50% of the test, (2) formulas and equations, 29%, and (3) problems, 21%. Two forms are now available, with promise of more as they are needed. With each is supplied a manual of directions, a key for scoring, and a form for class record. Percentile norms are based upon the records of 8000 high school seniors. The test covers materials common to the most widely used high school and elementary college textbooks. Due to the number of items (over 200) and variety of material involved, the test is more reliable and valid than the customary high school final examination or the usual college entrance examination. The reliability coefficient estimated by the Spearman-Brown formula is 0.87 on the basis of 90 college student records, and slightly higher on the basis of 200 high school student returns. Easy of administration and entirely objective in scoring, the test is convenient for application to large groups, as for measurement of achievement in high schools and for college entrance and placement purposes.—*L. Hatfield* (Illinois Woman's College).

854. Kefauver, G. N. The validity of bases for forming ability groups. *Teach. Coll. Rec.*, 1929, 31, 99-114.—This article presents an evaluation of the bases for ability groupings; a discussion of the importance and difficulty of obtaining an adequate criterion; a detailed report on an experiment in ability grouping carried out in Fresno, California, in 1925-26. The most valid single criterion for the prediction of success in the first year, either of junior or senior high school, is the teachers' judgment in the elementary school. Of the tests, the intelligence test was the best in general, but where ability groupings were made for each subject, the use of special achievement tests was superior. If a composite measure is to be used for routine distribution of pupils to ability groups for all subjects, it should include: (1) a composite of the marks of earlier grades together with a rating by the teachers of the

student's capacity; (2) mental test scores; (3) achievement test scores.—*J. M. Stalnaker* (Purdue).

855. Kelley, V. H. An analysis of the high school records of junior-college students. *School Rev.*, 1929, 37, 598-601.—The author concludes that the junior college is attracting students slightly superior to the average high school graduate and that the better high school students do not go to the better established colleges. The records of the high school students who graduated from the junior college show that they were superior students in the high school.—(Courtesy *J. Educ. Res.*)

856. Kellogg, C. E. Relative values of intelligence tests and matriculation examinations as means of estimating probable success in college. *School & Soc.*, 1929, 30, 893-896.—The subjects of the study were the students taking introductory psychology at McGill University in 1926-1927. Their matriculation examination scores and their scores on a revised version of the U. S. Army Alpha test as well as on the Thurstone Psychological Examination for College Freshmen were correlated with their grades in freshman courses. The intelligence test results and scholarship ratings correlated +.173, whereas the matriculation examination grades correlated with the latter +.747. The same correlations computed for the work of the sophomore and junior years showed a tendency for the former ones to increase and the latter to decrease. The apparent slight relationship between scholarship and intelligence test results is attributed to the effect of a goodly number of lazy but brilliant students, while the marked relationship of the former with the matriculation examination scores is ascribed to the high degree of similarity which exists between high school and college work at the freshman level. The author is concerned over the problem of motivating the indolent, uninterested student.—*H. L. Koch* (Texas).

857. Kiefer-Merry, F. What blind people think of arithmetic. *Teach. Forum*, 1929, 2, 8-12.—The replies of 197 people to the questionnaire printed in this article constitute the source of information for the study. Its purpose was to learn what kind of arithmetic problems blind people meet in everyday life, and to learn how much arithmetic blind people think should be taught in the schools and what methods should be used. It was also desired to find out how this information could be used in improving the present courses in arithmetic. The results of the survey show that most of the blind people use the simple arithmetic processes involved in ordinary business transactions. The majority thought that the arithmetic taught to blind children should be more than minimal essentials. Only a few of those replying used type slates, but the majority consider them a valuable aid in teaching arithmetic. The general opinion is that the bulk of arithmetic instruction should be oral.—*H. S. Clapp* (Children's Court, New York).

858. Kirkpatrick, J. E. Force and freedom in education. *Yellow Springs: Antioch Press*, 1929. Pp. 128. \$1.25.—The author advocates the liberation of education by the application of creative

methods, particularly in the colleges.—*R. R. Willoughby* (Clark).

859. Knox, J. E., & Davis, R. A. The scholarship of university students participating in extra-curricular activities. *Educ. Admin. & Supervision*, 1929, 15, 481-493.—Those who participated in activities ranked higher scholastically than those who did not. Women in activities were found to have a higher standing scholastically than men. When the nature of the activity was similar to the academic work, the students ranked higher scholastically, but when the nature of the activity was different from the academic work, the scholarship of the students in that activity ranked low. The study is based upon the marks made by 854 students participating in extra-curricular activities at the University of Colorado.—(Courtesy *J. Educ. Res.*)

860. Kraybill, D. B. The problem of admitting rural pupils to high school. *Penn. State College Bull., Dept. of Rural Educ.*, 1927, Res. Ser. No. 4.—An experimental study of the relative merit of the traditional essay type of written examinations and the new objective type of examination in admitting pupils to high schools. Results are presented for 7 Pennsylvania counties. On the whole, the written examination seemed to correlate highest with teachers' grades, and the objective tests highest with standardized test scores.—(Courtesy *J. Educ. Res.*)

861. Kregel, L. J. A summary of social science tests for the junior high school. *J. Educ. Res.*, 1929, 20, 308-317.—The author has listed all of the tests for the social sciences and has arranged, in tabular form, the following items for each: name of test, author, date, standardized norms, grades, reliability, validity, forms, time required, publisher, price and specific purpose and analysis. The tests are listed for history, geography and civics.—*S. W. Fernberger* (Pennsylvania).

862. Langer, J. [Cinematography in pediatric instruction.] *Monatssch. f. Kinderhk.*, 1929 (June).—*R. R. Willoughby* (Clark).

863. Levy, D. M. Individual psychology in a Vienna public school. *Soc. Service Rev.*, 1929, 3, 207-216.—*R. R. Willoughby* (Clark).

864. Lewerenz, A. S. An experiment in evaluating books read and enjoyed by school children. *Educ. Res. Bull.*, 1929, 9, 10-14.—This study is based upon 259 titles and 2349 reports from school children. It shows that library books are enjoyed by children not only according to their chronological ages, but also according to their mental ages. The study reveals a number of reading habits of children, relating to interest, intelligence, and types of materials read.—(Courtesy *J. Educ. Res.*)

865. Linehan, W. F. Training the emotions in the Boston public schools. *Rel. Educ.*, 1929, 24, 643-645.—This deals with the deranged emotional drives back of a child's behavior. Instances of treatment are given and references are also given to Boston school publications.—*J. P. Hylan* (Stoneham, Mass.).

866. Marsh, H. D. Standardizing the grading of laboratory reports. *Psychol. Rev.*, 1929, 36, 543-

547.—The system of grading laboratory reports found most satisfactory by the writer is presented.—*H. Helson* (Bryn Mawr).

867. McBee, M. Mental hygiene in the schools. *Rel. Educ.*, 1929, 24, 646-649.—There are many cities which have introduced mental hygiene clinics into their schools. Cases showing academic or disciplinary troubles are referred to it and measures taken for correction.—*J. P. Hylan* (Stoneham, Mass.).

868. Mead, A. R. Qualities of merit in good and poor teachers. *J. Educ. Res.*, 1929, 20, 239-259.—The study was made on the basis of judgments of pupils as to the qualities of their teachers, judgments of school officers, the listing by employment bureaus for teachers, and certain combination methods involving both subjective and objective procedures. Previous investigations are outlined. A check list of 40 items was prepared in which each of the items was defined. The results are from 33 elementary teachers, 27 high school teachers and 90 ranked as miscellaneous. Certain weaknesses of procedure and suggestions for future studies are indicated. The results indicate that the personal qualities are considered most necessary for success.—*S. W. Fernberger* (Pennsylvania).

869. Mingo, J. A list of materials and books suitable for use in remedial reading. *Teach. Coll. Rec.*, 1929, 31, 137-147.—An annotated list of 81 books and sets of material suitable for the use indicated in title for grades I-VI.—*J. M. Stalnaker* (Purdue).

870. Montessori, M. The child in the church. St. Louis, Mo.: Herder, 1929. Pp. xix + 191. \$1.90.—Montessori, whose kindergarten methods have received so much commendation, has now entered the field of religious education. This book, to which she contributes certain chapters, is rounded out by others which describe her general methods. According to these she allows the child freedom in a prepared environment. The schoolroom together with its apparatus and teacher provide the conditions in response to which the child unfolds its native ability. In religious education the apparatus is adapted from the ritual of the Roman Catholic church. To the child's deportment, carefully trained in the secular school, is here added kneeling and the attitudes becoming to worship. Attention is directed to the little movements of the children's muscles, and then to acts of their minds and consciences. They make their own silver rosaries and handle diminutive furniture like that used in the public service. Many of the exercises center around the celebration of the mass. The children themselves cultivate the grain and the vine. They make the hosts and offer the bread and wine at the altar. The freedom stressed by the Montessori method does not, however, allow apparatus to be used except as it was intended, and this principle checks any irrelevant use of sacred symbols. The teacher who is herself purged of sin is quick to check evil in the child. This correction alone provides the essentials of moral education.—*J. P. Hylan* (Stoneham, Mass.).

871. Montessori, M. Les principes de la psychologie appliqués à l'éducation. (The principles

of psychology as applied to education.) *Pour Père nouvelle*, 1929, 8, 221-223.—The Montessori method is characterized by a reproduction of reality, by spontaneous manifestation of childish activity. The environment is adapted to the child and not the child to the environment. The adult must not be considered as a perfect being whom the child must copy; on the contrary, adult authority should be reduced in order to develop the child's true personality. The environment should be so adapted to the child that he may find there all the elements necessary for his evolution.—*Math. H. Piéron* (Sorbonne).

872. Morgan, L. D. How effective is specific training in preventing loss due to the summer vacation? *J. Educ. Res.*, 1929, 20, 388-392.—Study carried on in a Kansas city school with two sixth grade classes taught by the same individual. Tests for reading and arithmetic were given. Special training in arithmetic, silent reading and problem solving was given one group for a period of two weeks and the children were tested during the last week of school. They were retested in September. The specific training considerably increased the efficiency of the experimental group as tested just before the end of school. Also the experimental group were found to have maintained their superiority for arithmetic, but to a slighter degree for reading or problem solving.—*S. W. Fernberger* (Pennsylvania).

873. Palmer, A. M. Newly elected college presidents. *School & Soc.*, 1929, 30, 852-856.—The author gathered for the 45 new college presidents, 44 men and 1 woman, which 1929 brought into office in the United States the following statistics: their general education, professional training, previous social service, and motivation in accepting their election.—*H. L. Koch* (Texas).

874. Pechstein, L. A. The problem of negro education in northern and border cities. *Elem. School J.*, 1929, 30, 192-200.—This article deals with the education of the negro living north of Mason and Dixon's line. Statements of educators, questionnaire and survey data, and school records were assembled. The following conclusions are drawn: (1) separation of races is operating in all walks of life, and is likely to continue; (2) the aims of education may be realized best by educating negroes in separate schools; (3) greater race solidarity and educational attainment are obtained by separation of the races in school; (4) the ideal separate public school for negroes in northern cities will provide (under a staff of negro teachers) better parent-pupil-teacher relations and better adjustment for mental deviates and problem cases.—*P. A. Witty* (Kansas).

875. Pressey, S. L., & Pressey, L. C. Pressey diagnostic vocabulary test for grades 1A to 3A. Bloomington, Ill.: Public School Publ. Co., 1929.—The words are selected from the Gates reading vocabulary list for the primary grades. There are two forms of this test.—(Courtesy *J. Educ. Res.*)

876. Pressey, S. L., & Pressey, L. C. Pressey diagnostic reading tests for grades 3 to 9. Bloomington, Ill.: Public School Publ. Co., 1929.—There are three tests in this series; vocabulary, paragraph meaning, and speed.—(Courtesy *J. Educ. Res.*)

877. Reineohl, C. M. Standardizing correspondence instruction. *J. Educ. Res.*, 1929, 20, 260-267.—A study of 2,382 assigned reports from 116 correspondence students. Discussion of the number of reports turned in each month by the students leads to a computation of the number of months in which students should be expected to complete courses with varying numbers of assignments. It was also found that when assignments were received too rapidly or when long lapses occurred, the quality of work was not as good. About one-fifth of the students dropped the courses before they were completed. The author finds that 24 assignments make a course of fairly satisfactory length for most students. It is therefore advised that students enrolling for a correspondence course should be encouraged to schedule their time for study and to work upon the course continuously and regularly.—*S. W. Fernberger* (Pennsylvania).

878. Robinson, B. M. The problem of the over-age girl. *Voc. Guid. Mag.*, 1929, 8, 61-66.—A survey of the Munger Intermediate School in Detroit found 201, one sixth, of the girls to be sixteen years of age. Since the largest number were in Grade 8A, they were selected to form an experimental class. They were separated from the boys, and given a teacher especially interested in them and a practical curriculum of domestic arts. They showed a marked change in attitude, appearance and interest. The experiment proved equally successful also for the teacher and the administration.—*M. B. Mitchell* (Yale).

879. Rotten, E. A chaque époque, son programme d'études. (Each period has its own program of study.) *Pour Père nouvelle*, 1929, 8, 214-217.—*Math. H. Piéron* (Sorbonne).

880. Russel, F. O., & Twining, P. E. A comparative study of the academic efficiency of certain urban and one-teacher rural schools. *Univ. Kansas Bull. Educ.*, 1929, 2, 18-20.—The achievement of fourth-grade and eighth-grade rural school pupils in 14 scattered districts in Bourbon County was compared with that of similar groups of urban students in the Fort Scott public schools, Kansas. When the groups were equated for intelligence, chronological age, and grade in school, the results in one grade (the fourth) favor urban students. The results in the eighth grade, however, favor rural students. The differences were not great in either case.—(Courtesy *J. Educ. Res.*)

881. Sáinz, F. Representación gráfica de los fenómenos anímicos. (The graphic representation of mental phenomena.) *Rev. de ped.*, 1929, 8, 494-502.—*J. W. Nagge* (Chicago).

882. Salisbury, F. S., & Smith, H. D. Prognosis of sight singing ability of normal school students. *J. Appl. Psychol.*, 1929, 13, 425-439.—A report of a three year experimental study with the purpose of evolving a prognostic test of sight singing ability. The test was intended primarily for the differentiation of normal school students according to their ability in sight singing. During the first year test materials were investigated; during the second, a criterion and a test were evolved; and the results were checked during the third year. The criterion

consisted of a test of four short songs of from eight to twenty measures, graded from easy to moderately difficult. Among the material investigated for test purposes were the Seashore tests; only two of these (pitch and tonal memory) were found significant enough to be of any use; their correlation with the criterion was .60. The correlation of intelligence with the criterion was found to be .03, although correlated with sight singing it gave .27 and with consonance .38. Factual knowledge about music notation was found to be of small prognostic value. After a year of experimentation an achievement test was constructed consisting of the following exercises: solfa syllables, dictation, lines and spaces, recognition of familiar songs from notation, scales, notes and rests, vocabulary and measures, and key signatures. The dictation test was found very valuable, and correlated with the criterion .79. A table gives the intercorrelations of these tests with 131 normal school students. After a careful statistical treatment of the data, weights were assigned to various test exercises, and the test, after revision, was given the following (third) year to a group of 144 students. According to the conclusions reached by the authors of this investigation, the most effective combination of test exercises for predicting sight singing ability is obtained by using weighted standard scores for dictation, pitch, and tonal memory, resulting in a multiple correlation of .84 with a probable error of .27 sigma in predicting true scores. In actual application only about 5% of the students promoted to advanced singing classes obtained scores lower than grade C on the five point grading system.—D. L. Zys (New York City).

883. Schutte, T. H. Students' estimates of their ability and achievement. *J. Educ. Res.*, 1929, 20, 394-396.—Students' estimates of their mental ability are compared with their scores on the Otis Self-Administering Test, and their estimates of their scholastic achievement are compared with their school grades. The study was carried on at the Woman's College of Alabama with a class of 111 sophomores in psychology just before the final examination. It was found that those of lower mentality tend to overestimate their ability and those of superior intelligence tend to underestimate it. On the whole, there was a tendency to overestimation.—S. W. Fernberger (Pennsylvania).

884. Seeling, O. Zum Problem der Beschulung und erziehlchen Versorgung Schwererziehbarer. (The problem of educational care and training for backward pupils.) *Hilfsschule*, 1929, 22, 577-788.—The author deals primarily with the necessity for special procedures for those difficult to educate. He investigates the possibility of practical work in this new but extensive field. A description is given of experiments made in Berlin since 1928 on special education for retarded pupils.—O. Seeling (Berlin).

885. Shaw, L., & Crumpton, C. E. The attitude of the child in matters of skill. *Elem. School J.*, 1929, 30, 218-222.—The study here reported was preceded by a series of studies covering several years of investigation of the handwriting of boys and girls in Detroit. Handwriting is not a part of the Detroit

junior high-school curriculum. Some pupils write well, some poorly. Instead of requiring those who write poorly to do special work, the matter is handled through a handwriting club in the English department. The author concludes that attitude is a potent factor in the development of skill.—(Courtesy J. Educ. Res.)

886. Simpson, R. G. The effect of specific training on ability to read historical materials. *J. Educ. Res.*, 1929, 20, 343-351.—The results of 1,074 5th, 6th and 7th grade pupils, partly from schools in Pittsburgh and the rest from outlying schools in Allegheny County. After pairing for groups the scores of 606 pupils were finally included in the study. So far as possible, a single instructor was in charge of the experimental and the control group in each school. The experimental groups were given special training in answering questions, evaluating, outlining and summarizing historical materials for 5 recitation periods in some cases and for 8 periods in others. The author finds that the ability to organize was improved by the experimental procedure. Certain orders of the four factors employed are more effective than other orders. Also outlining, as a method of teaching, is more effective than any other special method.—S. W. Fernberger (Pennsylvania).

887. Smith, H. L. Sixteenth annual conference on educational measurements. *Indiana Univ., Bull. School Educ.*, 1929.—This bulletin contains papers by E. A. Johnson on some financial phases of the support of thirty representative junior colleges; by A. T. Stanforth on measuring the work of the high school; by Dean H. L. Smith on education for world friendship and understanding; by J. J. Jones on problems dealing with scholastic achievement in a teachers' college; by W. W. Wright on new-type testing; by M. E. Haggerty on education and the new world; by Frances Dearborn on aptitude tests for teachers; by G. K. Wells on trade tests; by R. C. Searf on psychological tests; by C. G. F. Franzen on factors entering into successful teaching; by G. C. Brandenburg on teacher rating; and by M. E. Haggerty on the improvement of college education.—(Courtesy J. Educ. Res.)

888. Sones, W. W. D., & Harry, D. P. Sones-Harry high school achievement test. *Yonkers-on-Hudson: World Book*, 1929.—The test is primarily for high school and college entrance, but is also suitable for college classes in practice teaching. It consists of four parts: language and literature, mathematics, natural science, and social studies. Each part is divided into several sections arranged in order of difficulty. Most of the questions are of a multiple choice type with answers recorded by number. Two forms of the test are provided with a reliability coefficient of at least .86. Tentative standards are published in the manual of directions. Keys for scoring and blanks for class records are furnished with the tests.—M. B. Mitchell (Yale).

889. Sorenson, H. Why teaching success does not correlate highly with measured intelligence. *Educ. Admin. & Supervision*, 1929, 15, 602-606.—The author attributes the low correlations ordinarily

found between intelligence and teaching success to errors of measurement and the selective character of the groups measured.—(Courtesy *J. Educ. Res.*)

890. Stabler, D. A. The relation between the civic information possessed by ninth-grade pupils and their practices in citizenship. *School Rev.*, 1929, 37, 697-706.—A study of the relationship between the civic information possessed by 120 ninth-grade pupils and their practices in citizenship. A coefficient of correlation of .41 was found between the total average scores on the tests of civic information and the number of civic deficiencies noted in the pupils studied. The author concludes that the possession of a greater amount of civic knowledge aids pupils in their school citizenship practices.—(Courtesy *J. Educ. Res.*)

891. Stedman, M. B. A study of the possibility of prognosis of school success in typewriting. *J. Appl. Psychol.*, 1929, 13, 505-515.—To discover what factors were indicative of success or failure in typewriting, 75 tenth-grade pupils were subjected to a battery of 6 tests (Thurstone Employment Test; Terman Test of Mental Ability; Arithmetic; Spelling; Physical Examination). The pupils were then given the Blackstone proficiency and the Underwood tests. The scores on these tests were then correlated. In addition to these data, those of 3159 high school students in the Los Angeles school system were studied with the purpose of determining the relationship between intelligence (as measured by tests) and success in typewriting. It was found that intelligence tests, as such, had little or no diagnostic value in predicting success in typing. Maximum proficiency in typing was shown by students with an IQ between 114 and 125 (chronological age 14) while those with a higher IQ performed less well. It may be interesting to note that arithmetic correlated with typing higher than did a test of spelling. The correlation between the Thurstone Clerical Test and typing was low ($.21 \pm .11$); the correlations between typing and the McQuarrie Test of Mechanical Ability were also low. The highest score of the "healthy" group was 185, whereas that for the "physically handicapped" was 81.—*D. L. Zyve* (New York City).

892. Stogdill, E. L. The maladjusted college student. *J. Appl. Psychol.*, 1929, 13, 440-450.—After a brief history of the mental hygiene movement in American colleges, the writer describes the activities and the methods used at Ohio State University by the Student Consultation Service for maladjusted students. It was found by the writer that for practical purposes the "anecdote method" describing actual cases, was preferable to numerically evaluated scales. The students seem to prefer personal interviews to impersonal methods of diagnosis. The answers received by the writer to a questionnaire sent to a number of formerly maladjusted students who profited by the advice given them by the Consultation Service seem to corroborate this theory. The article concludes with a number of suggestions concerning the problem of the maladjusted student.—*D. L. Zyve* (New York City).

893. Thorndike, E. L. The need of fundamental analysis of methods of teaching. *Elem. School J.*,

1929, 30, 189-192.—The need of scientific analysis of educational method is stressed.—*P. A. Witty* (Kansas).

894. Turney, A. H., & Ummel, M. An analysis of frequency of error in grammar and sentence structure among selected junior high-school pupils. *Univ. Kansas Bull. Educ.*, 1929, 2, 14-17.—A study to determine the frequency and kinds of errors made by junior high-school students in free writing. The results of the investigation are presented in tabular form.—(Courtesy *J. Educ. Res.*)

895. [Various.] The students speak out. New York: New Republic, 1929. Pp. 269. \$1.00.—22 essays by recent graduates of as many different colleges, submitted in response to the *New Republic's* invitation to write on *College as It Might Be*. The articles combine critical comment on the present situation in higher education with suggestions for improvement.—*R. R. Willoughby* (Clark).

896. Vogt, P. L. Why students fail. *School & Soc.*, 1929, 30, 847-848.—One-third of the students at the University of Oklahoma failed in one or more courses in the session of 1927-1928. These failures are the subject of the study. Over 75% of them belonged to the freshman and sophomore classes. Of the students who took sub-freshman English, presumably because of poor preparation in secondary school, very few fell short in any of their work. Nor did the size and rank of the high schools from which the students came seem to bear any relation to their failures. The sorority and fraternity groups too were conspicuously less unsuccessful than the non-club group. The author concludes that failure seems to be determined in large measure by the courses elected as well as by the instructors from whom the courses were taken.—*H. L. Koch* (Texas).

897. Walter, F. Quelques réflexions. (Some reflections.) *Pour l'ère nouvelle*, 1929, 8, 183-184.—The author believes it possible to establish a psychological technique for education. The educative process demands first of all an equality of rights and liberty for both the educator and the student as well as a reciprocal adaptation. It is necessary to give the child the artist's viewpoint, for if scholastic work seems laborious it is not because it is too hard for the child, but because imposed work does not interest him. The creative school of the future must aim to give a minimum of necessary information.—*Math. H. Piéron* (Sorbonne).

898. Watson, G. B. An approach to the study of worship. *Rel. Educ.*, 1929, 24, 849-858.—A variety of religious services was arranged for older boys. They were asked to judge of the effect of these upon themselves, and the results were tabulated. It was found that they responded freely to services in modern phraseology dealing with events of modern life. Their greatest response was to emotional services.—*J. P. Hylan* (Stoneham, Mass.).

899. Weersing, F. J., & Kcos, L. V. Guidance practice in junior colleges. *Calif. Quar. Secondary Educ.*, 1929, 5, 93-104.—The data presented are based upon 28 replies from 30 public junior colleges in the state of California, and 24 replies from 28 public junior colleges in 9 other states, making, altogether,

a total of 52 institutions in 10 states. The authors conclude that student guidance is a growing problem commanding increasing attention. A list of practices, with the numbers and percentages reporting each, is given.—(Courtesy *J. Educ. Res.*)

900. Weinberg, D. *L'école unique en Hollande et le problème de la sélection.* (The unified school in Holland and the problem of selection.) *L'université nouvelle*, 1929, 4, 69-71.—There has been for a long time in Holland a system which resembles the Ecole Unique. In this system there is no mode of selection for promotion from the first to the second stage. As it happens, more than half of the students admitted to the secondary schools find themselves unable to pursue their studies profitably and fail to obtain their baccalaureate degree. Therefore the author sees a definite need for selection by means of psychological tests given by psychologists or by teachers with the psychological point of view.—*Math. H. Piéron* (Sorbonne).

901. Williams, R. R. *Extensive reading versus intensive study of literature.* *School Rev.*, 1929, 37, 666-678.—A study of extensive reading versus intensive reading of literature, involving some 200 ninth-grade classes in English. The investigation is of the experimental sort. The author concludes that there is no significant difference in the comprehension of literature attained by the intensive-study classes and extensive-study classes. Neither was there any significant difference in the ability of the two groups to remember the details of the selections read. Considering the time spent, the extensive reading method is more effective in achieving the aims of instruction in literature than intensive-study methods.—(Courtesy *J. Educ. Res.*)

902. Wilson, G. M. *The purpose of a standardized test in spelling.* *J. Educ. Res.*, 1929, 20, 319-326.—A test is of value only if it serves the main curricular aim of the subject being tested and if it also has a purpose in properly reinforcing good methods of teaching. The author gives an analysis of the Stanford Achievement Test, revised 1929, for spelling. Comparison is made from the Thorndike Word Book. A total of 459 children from Grade 1A up to Grade 10B were tested. The author objects to many of the words given for spelling in the higher grades. Analyses of Forms V and W of the Stanford Test are made for the grades in which the words are supposed to be given. The words are distributed over the different grades beyond the 10th. Although the author finds that the minor criteria for this test have been excellently heeded, he objects to its use and submits that the best test for spelling ability is a student's entire word list.—*S. W. Fernberger* (Pennsylvania).

903. Wilson, G. M., & Parsons, A. R. *Critical examination of a standardized spelling test.* *Educ. Admin. & Supervision*, 1929, 15, 494-498.—The authors conclude, from a critical examination of a standardized spelling test, that, if in the year 1928-1929, a "standardized" test could be made, published, and recommended, that has such obvious defects as those revealed in his data, then undoubtedly, it is time that schoolmen begin to understand the fundamental

principles of a good examination.—(Courtesy *J. Educ. Res.*)

904. Woodbridge, F. J. E. *Contrasts in education. II. Education and philosophy.* *Teach. Coll. Rec.*, 1929, 31, 121-136.—The second of a series of three lectures given under the provision of the Julius and Rosa Sachs Endowment Fund, before the faculty and students of Teachers College, on March 14, 1929.—*J. M. Stalnaker* (Purdue).

905. Wright, W. W. *The development and use of a composite achievement test.* *Indiana Univ. Bull. School Educ.*, 1929, 5 (January). Pp. 90.—This bulletin presents data pertaining to the validity, reliability, and weighting of the Indiana Composite Achievement Test, with a summary of results as derived from four types of rural schools. The Indiana Composite Achievement Test, when combined with ratings for industry by the method of multiple correlation, correlated $.827 \pm .01$ with success in the ninth grade as measured by average school marks.—(Courtesy *J. Educ. Res.*)

[See also abstracts 496, 511, 512, 585, 602, 616, 739, 773, 779, 788, 793, 910, 911, 928.]

BIOMETRY AND STATISTICS

906. Cureton, E. E. *Computation of correlation coefficients.* *J. Educ. Psychol.*, 1929, 20, 588-601.—The formulas derived by Huffaker and by Orleans are discussed. The writer offers "a derivation of a similar formula involving the sum of the squares of the sums of gross scores, a derivation of certain checking formulae, and a method of computation involving a system of grouping that is consistent throughout, and hence not productive of excessive grouping errors." Every step is mechanical, and by omission of the scattergram and by using a calculating machine a "true" Pearson r may be obtained with a saving in time.—*J. A. McGeoch* (Arkansas).

907. Kelley, T. L., & McNemar, Q. *Doolittle vs. the Kelley Salisbury interaction method for computing multiple regression coefficients.* *J. Amer. Statis. Asso.*, 1929, 24, 164-169.—Doolittle method preferable for small number of variables; as number increases K.-S. method is shorter and preferable.—(Courtesy *Bibliographica Eugenia*).

908. Lindquist, E. F., & Stoddard, G. D. *Study manual in elementary statistics.* New York: Longmans, Green, 1929. Pp. 109. \$1.80.—A selection and organization of study and reference material from standard texts, supplemented with appropriate discussions, questions, and exercises. Rather than cultivate mere computational skill the authors aim to develop an appreciation for statistical techniques. There are chapters on the measures of central tendency, logarithms, measures of variability, polygons and histograms, ogives, relationships of the normal distribution curve, various measures of reliability, correlations and regressions, correlation ratio, partial and multiple correlation, and methods of combining test scores. There is an appendix presenting 64 supplementary problem exercises.—*N. L. Munn* (Pittsburgh).

909. Spearman, C. *Response to T. Kelley.* *J. Educ. Psychol.*, 1929, 20, 561-568.—Spearman styles

Kelley's *Crossways* [i.e., *Crossroads*] in the *Mind of Man* "an outstanding event in recent psychology," and comments upon Kelley's treatment of the theory of two factors. Spearman considers that Kelley's findings clearly corroborate the theory in all major details: but regarding the interpretative sub-theories there is less agreement. In particular, Kelley holds that *g* may arise from heterogeneity in the population tested, while Spearman replies that *g* may measure psycho-physical energy, differences in which may produce the very heterogeneity of which Kelley speaks. Spearman also replies to the criticism that he has neglected such factors as sex, age, and race, that he has neglected the use of partial correlations, and that he has employed too small populations. He cites papers of his in which certain of these matters have been treated, and states that his conclusions have been based on samples aggregating at least 10,000 subjects. He likewise turns Kelley's criticisms against Kelley's own work. The existence of group factors and Kelley's technique for factorizing abilities are critically discussed.—J. A. McGeoch (Arkansas).

[See also abstract 916.]

MENTAL TESTS

910. [Anon.] Bibliography of educational and mental test references relating to the blind. *Teach. Forum*, 1929, 2, No. 1.—A bibliography of 38 titles in the field of education and mental tests for the blind. References listed may be found in the library of the Foundation.—H. S. Clapp (Children's Court, New York).

911. Barry, H. J., & Crockett, A. C. Detroit mechanical aptitudes examinations for boys and girls. Bloomington, Ill.: Public School Publ. Co., 1929.—Three types of material are used in these tests: (1) tool knowledge or information, (2) motor skill, and (3) visual acuity.—(Courtesy *J. Educ. Res.*)

912. Bracey, H. A practical comparison of intelligence tests. *Medical Officer*, 1929, 41, 227.—R. R. Willoughby (Clark).

913. Brigham C. C. Fourth annual report of the Chairman of the Commission on Scholastic Aptitude Tests. New York: College Entrance Examination Board, 1929, Pp. 38.—8610 candidates took the Scholastic Aptitude Test in June 1929. Centers at which the tests were given and colleges for which they were taken are listed. To increase the accuracy of scoring and reporting, a policy of careful checking of all scoring operations will be followed in the future, involving an increase in time between date of test and mailing of reports. Details of checking errors and of scoring the tests are given. "The girls obtain better mean scores than the boys in all tests except analogies, in which the boys' mean score is slightly superior." Inter-correlations and tetrad differences of the sub-tests are given for Forms B and C. Form D represents a distinct advance over Form C in the internal consistency of the battery of tests. The use of the total score of the test as a criterion for the validity of a test item is discussed. 302 boys and girls who took Form B in 1927 and Form C in 1928 showed a mean gain of 42 points with a sigma of gains of 51. The data which the committee

has at present are insufficient to determine an increment of growth. Grade on the Scholastic Aptitude Test and standing in college were found at one college to have a correlation of .52. A mathematical aptitude test has been tried in one college and was found to correlate highly with grades in mathematics. Such a test is suggested as a supplementary section to make the Scholastic Aptitude Test more generally useful for selection of scientific students.—N. Goldman (Clark).

914. Caldwell, M. G. The intelligence of delinquent boys committed to Wisconsin Industrial School. *J. Crim. Law & Crimin.*, 1929, 20, 421-428.—A comparison of delinquent children committed to the Wisconsin Industrial School with Terman's 905 unselected children shows a much greater proportion of children below normal in intelligence in the former group. 65% of 408 delinquent boys and 78% of 252 delinquent girls as against 11% of Terman's unselected group have IQ's below 85.—D. Kats (Princeton).

915. Dayton, N. A. The relationship between physical defects and intelligence. *New England J. Med.*, 1929, 201, 245-259.—Physical examinations were made of 14,379 retarded children in the public schools of Massachusetts. Under-average weight was found to be characteristic of children with an IQ of 69 or lower. It is not characteristic of children with an IQ of 70 or over. No difference was found between the mean intelligence quotients of groups over-average in weight and groups average in weight. The mean IQ of the average-weight group exceeds that of the under-average group by 5.4 points for males and 4.3 points for females. Groups with any one of the six physical defects studied were found to have a lower mean intelligence than groups without the same defects. "The lowering of the mean intelligence associated with these factors is more marked in the case of males than females. This is true for each defect and each combination of defects."—D. M. Olson (Clark).

916. Dunlap, J. W. On the technique of establishing the "goodness" of an intelligence test. *J. Educ. Res.*, 1929, 20, 367-372.—Discussion of the methods employed by V. A. Jones in his monograph *The Effect of Age and Experience on Tests of Intelligence*. After a discussion of the statistical criteria of "goodness," the author concludes that the need is for a better method of expressing mental maturity and of measuring it.—S. W. Fernberger (Pennsylvania).

917. Fleming, E. G., & Fleming, C. W. The validity of the Matthews' revision of the Woodworth personal data questionnaire. *J. Abn. & Soc. Psychol.*, 1929, 23, 500-505.—If the validity of the test be granted, then this study indicates its unreliability. This assumption, however, is not warranted, so that it is necessary to conclude that the test is not a valid test of emotional balance as defined in this study.—C. H. Johnson (Boston Psychopathic Hospital).

918. Hayes, S. P. The new revision of the Binet intelligence tests for the blind. *Teach. Forum*, 1929, 2, 2-4.—The 1929 revision is a fairly trustworthy

scale for testing blind children. The IQ's obtained approximate the normal curve of distribution. The expected "constancy of the IQ" is revealed by the retests at two-year intervals. The history of the work on the adaptation of mental tests for the blind is summarized. A list is given of the tests which have been omitted because of their unsuitability for blind subjects. Tests which the 1929 Guide substitutes in the place of those omitted are also listed, as well as their sources.—*H. S. Clapp* (Children's Court, New York).

919. **Heid, H.** The interpretation of mental tests. *II. Lancet*, 1929, 216, 1369-1370.—This is a discussion of some of the common standardized mental tests. It is pointed out that these tests can only adequately be given by men with experience, but it is suggested that the physician may pick out and use a few of the simpler tests in order to aid him in his diagnosis.—*W. T. Heron* (Minnesota).

920. **Henning, H.** Tests de caractère—nouveaux appareils et méthodes à deux personnes. (Character tests. New apparatus and methods for two persons.) *Hygiène ment.*, 1929, 24, 88-93.—The author holds that character is displayed only when two or more persons influence each other, as in the case of charity, deception, malignity, social feeling, etc. Therefore, in his vocational testing, he makes use of character tests in which two persons consider each other either as collaborators or as rivals. The author has already constructed 25 different kinds of apparatus and methods of this nature.—*Math. H. Piéron* (Sorbonne).

921. **Highsmith, J. A.** Selecting musical talent. *J. Appl. Psychol.*, 1929, 13, 486-493.—The investigation was made to determine the prognostic value of the Seashore Measures of Musical Talent for students entering a school of music. It also attempted to determine the value of intelligence tests (Terman Group Test of Mental Ability and Thurstone Psychological Examination) in predicting success in various courses required of students of the School of Music of the North Carolina College for Women. The tests were given to 59 girls who entered the School of Music in September, 1922. The criteria used were marks in music courses and the relative length of time students remained in college. It was found that partial correlation of applied music marks and Seashore test scores, when intelligence is held constant, is .175, whereas the correlation between applied music marks and intelligence test scores is .423. The conclusions reached in this investigation are: (1) the validity of the Seashore tests when measured by success in music as expressed in school marks is very low ($r = .312$); (2) scores on the Seashore tests, taken singly or as a whole, show practically no relationship to students' abilities in musical performance; (3) intelligence tests gave a better prediction ($r = .423$) of success in music than did the Seashore tests.—*D. L. Zieve* (New York City).

922. **Jones, H. E.** A comparison of objective examination methods. *J. Educ. Method*, 1929 (Feb.), 273-276.—"A form of multiple choice test is described ('controlled completion') yielding a reliability of between .8 and .9 in an examination of ap-

proximately 90 minutes. The Thorndike mean of the group is 83 with an S.D. of 12.6. This test showed a corrected correlation of .82 with a T-F examination of 130 items. The coefficient is affected only very slightly by parcelling out intelligence scores. The T-F and the controlled completion are shown to possess the same reliability per unit of time. Administratively, the completion method is markedly superior. Comparative data on validity are not yet available."—*N. L. Munn* (Pittsburgh).

923. **Lowery, H.** Fundamental considerations in the study of musical ability. *J. Educ. Psychol.*, 1929, 20, 584-587.—The writer makes the point that "in devising a scheme of tests of musical ability, technique and interpretation in music must be distinguished and that the interpretative aspects of musical performance must form the basis of any scheme."—*J. A. McGeoch* (Arkansas).

924. **MacKaye, D. L.** Interrelations of speech and intelligence. *Amer. J. Sociol.*, 1929, 35, 353-368.—Both the methods of intelligence testing and classroom experiences indicate that "intelligence" as the word is used in education refers to abilities identical or highly correlated with speech functions. Experience provides two signs of this correlation in a quantitative sense—differing abilities in storing up words for use and differing abilities in handling quantities of verbal terms at one time. The quantitative limit may be ascertained by tests calling for word reproduction without the stimulus of a running idea. A further test reveals two types of qualitative response in the high-quantity testing group, indicating that differing behavior responses in different individuals may be based on concepts of great differences in clarity but resulting from the same word-stimulus. Difficulty in rapidly summing up relationships between words in the same run of thought creates a difficulty in handling words as symbols of ideas in place. There is a suggestion that these differences are not innate, but result from exposure to differing social environment, which education does not attempt to overcome. Success of a democracy may be intimately related to speech functions, to the extent that twilight zones of speech—that is, zones stimulating vivid rather than clear concepts—are found in different parts of the vocabulary scale in different individuals.—(Courtesy *Amer. J. Sociol.*)

925. **Morris, E. H.** Morris trait index L. Bloomington, Ill.: Public School Publ. Co., 1929.—The purpose of this index is to secure the predominating trends of an individual's reactions by having him indicate his likes and dislikes, characteristic feelings and attitudes toward typical situations.—(Courtesy *J. Educ. Res.*)

926. **Neymann, C. A., & Kohlstedt, K. D.** A new diagnostic test for introversion-extroversion. *J. Abn. & Soc. Psychol.*, 1929, 23, 482-487.—A new test for introversion-extroversion is presented. This test has been standardized on 100 cases of schizophrenia and 100 cases of manic-depressive insanity. The results coincide in 93% of the cases with those obtained by prolonged clinical observation. Similar results are obtained by applying the test to 200 normal in-

dividuals.—*C. H. Johnson* (Boston Psychopathic Hospital).

927. *Remmers, H. H.* Systematic differences in the various parts of the Herring Revision of the Binet-Simon Test when applied to normal dull adults. *J. Educ. Psychol.*, 1929, 20, 622-627.—The Herring Revision was given to 101 men in the lower fourth of Purdue freshmen. Certain significant differences between the different parts of the test appeared and these are interpreted to be "genuine differences in mental functions for the group in question as compared with the unselected sampling represented by the Herring Revision norms." This hypothesis is discussed in the light of other facts.—*J. A. McGeoch* (Arkansas).

928. *Stanton, H. M.* Psychological tests—a factor in admission to the Eastman School of Music. *School & Soc.*, 1929, 30, 889-891.—Students, 459 in number, who have entered the Eastman Music School during the last 4 years have been given the 6 Sea-shore Measures of Musical Talent and an Iowa comprehension test. The relation between scores on these tests and first semester achievement in the Music School as well as later survival has been studied, with the result that the following policy in regard to admissions has been established. A student with an A or B musical talent is admitted regardless of his comprehension test standing, but a student with a C+ musical talent must have a comprehension score of D or above and a student with a C— musical talent must have a comprehension test score of A or B.—*H. L. Koch* (Texas).

929. *Thurstone, L. L., & Ackerson, L.* The mental growth curve for the Binet tests. *J. Educ. Psychol.*, 1929, 20, 569-583.—The method of absolute scaling has been applied to the Stanford-Binet M.A. data from 4208 white children ranging in C.A. from 3 to 17. The following facts concerning the laws of mental growth are derived: the mental growth curve has a positive acceleration up to the age of about 10 years; it is asymptotic to an adult level; it has an inflection point somewhere in the age range 9 to 12, and this point comes earlier for bright than for dull children; the curve is asymptotic to absolute zero; absolute variability of test intelligence increases with age until adult intelligence is attained, and is directly proportional to the absolute mean test performance for successive age groups under uniform conditions of selection. The usual textbook curve of mental growth, negatively accelerated from birth and with no inflection point, is thus contradicted.—*J. A. McGeoch* (Arkansas).

930. *Town, C. H.* A clinical test to determine emotional trends and emotional balance. *J. Abn. & Soc. Psychol.*, 1929, 23, 488-499.—Situations were described and the examinee requested to reply what he would do when confronted by the various situations. A definite set of situations were outlined in test form, as it was discovered that the test method breaks down the self-conscious reserves quite naturally and rapidly and leads to a much fuller self-revelation than the free conversational method employed so generally by psychiatrists.—*C. H. Johnson* (Boston Psychopathic Hospital).

931. *Van Alstyne, D.* Van Alstyne picture vocabulary test for pre-school children. Bloomington, Ill.: Public School Publ. Co., 1929.—"This test for vocabulary comprehension may be used with children whose mental ages are between two and five years." There are 45 cards with 4 pictures on each card. The subject is asked to point to the object which represents the test word. The reliability of the test is .87. The correlation with the Kuhlmann mental test is practically perfect.—*M. Goodrie* (Clark).

932. *Weber, C. O., & Maijgren, R.* The experimental differentia of introversion and extraversion. *J. Genet. Psychol.*, 1929, 36, 571-580. Laird's and Conklin's so-called tests of introversion-extraversion were applied to the same group of college students, with results that failed to show any significant correlations between the two tests: they cannot both be valid tests of these traits. But neither of them correlated well with other tests (Kent-Rosanoff, Pressey X-O, group intelligence) that are supposed to bring to light some of the characteristics of the introvert. The question is raised as to whether introversion-extraversion is a conglomerate of superficial traits or is based upon some profound psychological difference.—*J. F. Dashiell* (North Carolina).

933. *Whitman, R. H.* A short scale for measuring introversion and extroversion. *J. Appl. Psychol.*, 1929, 13, 499-504.—The scale is based upon the Colgate Personal Inventory Form C-2, but is much shorter than the latter, since it requires only ten instead of forty minutes. It contains ten questions related to ten different traits, with multiple choice (five) graded answers ranging from extreme introversion to extreme extroversion. The validity of the scale (agreement of a single self-rating with the average of two ratings by acquaintances) was $.58 \pm .05$; reliability (correlation of two ratings a month apart), $.82 \pm .03$. These traits were selected from 48 traits tested for their diagnostic quality upon 276 college juniors and sophomores. The upper and lower quartiles in the scores of these students were designated respectively as those of introverts and extroverts. The author believes that "the scale should have a wide range of use in industrial and personnel work."—*D. L. Zyve* (New York City).

934. *Wyman, J. B.* The measurement of interest. *Voc. Guid. Mag.*, 1929, 8, 54-60.—A group association test was devised to measure the direction of a child's interests. These are classified as intellectual, social, and activity interests. The subjects, seventh grade pupils, approximately twelve years old, were rated by their teachers. They were placed in six groups, three of which showed the major interests and three of which lacked them. All the responses were then evaluated on a five-point scale with respect to each of the interest. By scoring each response on this scale and summing, the direction of the child's interest could be determined by comparing the number of points received for each interest. The test was given in various forms to over 2,500 subjects. Reliability coefficients were calculated.—*M. B. Mitchell* (Yale).

[See also abstracts 512, 569, 658, 728, 739, 836, 842, 856, 857, 882, 883.]

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